IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

SECURITIES AND EXCHANGE COMMISSION	Case No. 2:15-cv-00269-MAK	
Plaintiff,		
v.		
BONAN HUANG, et al.		
Defendants.		

PLAINTIFF SECURITIES AND EXCHANGE COMMISSION'S APPENDIX TO MOTION FOR SUMMARY JUDGMENT AGAINST DEFENDANTS BONAN HUANG AND NAN HUANG

PART 4 OF 10 (0197-0486)

November 5, 2014, for \$41,170. Exhibit 12 is the OptionsHouse trading activity reflecting these trades. Purchasing these call options meant that Bonan Huang would profit from an increase in the price of Chipotle's stock.

- 20. On July 21, 2014, defendant Nan Huang purchased 34 contracts of call options on Chipotle's stock with strike prices ranging from \$597.50 to \$617.50 and expiration dates ranging from August 5, 2014 to November 5, 2014, for \$56,500. Exhibit 13 is the partially redacted OptionsHouse trading activity reflecting these trades. Purchasing these call options meant that Nan Huang would profit from an increase in the price of Chipotle's stock.
- 21. On July 21, 2014, after the market closed, Chipotle released its sales and earnings data for the second quarter of 2014. This data showed that Chipotle's same quarter revenue increased by 28.6%. By market close on July 22, 2014, Chipotle's share price had increased from approximately \$590 a share to approximately \$660 a share, for a one-day increase of approximately 11.8%. Exhibit 14 is a true and correct copy of the press release issued by Chipotle on July 21, 2014. Exhibit 15 is a true and correct copy of daily share price for Chipotle during the relevant time period.
- 22. On July 22, 2014 defendant Bonan Huang sold his options for Chipotle for \$128,566, realizing a one-day return of approximately 220%. See Exhibit 12.
- 23. On July 23, 2014 (and dates shortly thereafter) defendant Nan Huang sold his options for Chipotle for approximately \$215,310, realizing a short-term return of approximately 281%. See Exhibit 13.
- 24. Exhibit16 is a document bearing Bates numbers SEC-UNITED-E-0000003-006 produced by United Airlines in this matter.

- 25. Exhibit17 is a document bearing Bates numbers SEC-UNITED-P-0000012-015, produced by United Airlines in this matter.
- 26. Exhibit 18 is a download from Yahoo! Finance showing certain periodic analyst estimates for earnings and revenue for Chipotle.
- 27. Exhibit 19 is a press release from Restoration Hardware dated September 10, 2013.
- 28. Exhibit 20 is a document bearing Bates numbers SECP-COF-00001848-850, produced by Capital One in this matter.
- 29. Exhibit 21 is an excerpt from a document bearing the name 4ZE89435.xls and production ID # ID # P I01:00000022, produced by OptionsHouse in this matter.
- 30. Exhibit 22 is an excerpt from a document bearing the name 5PD45586.xls and production ID # P I01:0100000014, produced by OptionsHouse in this matter.
 - 31. Exhibit 23 is Plaintiff's First Set of Interrogatories Directed to Bonan Huang.
 - 32. Exhibit 24 is Plaintiff's First Set of Interrogatories Directed to Nan Huang.
 - 33. Exhibit 25 is Plaintiff's Second Set of Interrogatories Directed to Bonan Huang.
 - 34. Exhibit 26 is Plaintiff's Second Set of Interrogatories Directed to Nan Huang.
- 35. Exhibit 27 is Plaintiff's First Set of Requests for Admission Directed to Bonan Huang.
- 36. Exhibit 28 is Plaintiff's First Set of Requests for Admission Directed to Nan Huang.
- 37. Exhibit 29 is Plaintiff's Second Set of Requests for Admission Directed to Bonan Huang.

- 38. Exhibit 30 is Plaintiff's Second Set of Requests for Admission Directed to Nan Huang.
- 39. Exhibit 31 is Defendant's Responses and Objections to Plaintiff's First Set of Interrogatories Directed to Bonan Huang.
- 40. Exhibit 32 is Defendant's Responses and Objections to Plaintiff's First Set of Interrogatories Directed to Nan Huang.
- 41. Exhibit 33 is Defendant Bonan Huang's Answers to Plaintiff's Second Set of Interrogatories.
- 42. Exhibit 34 is Defendant Nan Huang's Answers to Plaintiff's Second Set of Interrogatories.
- 43. Exhibit 35 is Defendant Bonan Huang's Supplemental Answers to Plaintiff's Second Set of Interrogatories, dated September 28, 2015.
- 44. Exhibit 36 is Defendant Nan Huang's Supplemental Answers to Plaintiff's Second Set of Interrogatories, dated September 28, 2015.
- 45. Exhibit 37 is Defendant Bonan Huang's Answers to Plaintiff's First Set of Requests for Admission.
- 46. Exhibit 38 is Defendant Nan Huang's Answers to Plaintiff's First Set of Requests for Admission.
- 47. Exhibit 39 is Defendant Bonan Huang's Responses to Plaintiff's Second Set of Requests for Admission.
- 48. Exhibit 40 is Defendant Nan Huang's Responses to Plaintiff's Second Set of Requests for Admission.

- 49. Exhibit 41 contains address information downloaded from the website of Scottrade, Inc., a brokerage firm utilized by Defendant Bonan Huang.
- 50. Exhibit 42 contains address information downloaded from the website of Apex Clearing Corporation, the parent company of a brokerage firm utilized by Defendant Nan Huang.
- 51. Exhibit 43 contains address information downloaded from the website of MB Trading, a brokerage firm utilized by Defendant Nan Huang.
- 52. Exhibit 44 contains address information downloaded from the website of COR Clearing LLC, a brokerage firm utilized by Defendant Nan Huang.
- 53. Exhibit 45 contains address information downloaded from the website of OM Securities, LLC (doing business as OptionsHouse), a brokerage firm utilized by Defendants Bonan Huang and Nan Huang.
- 54. Exhibit 46 contains address information downloaded from the website of TradeStation Securities, Inc., the parent company of a brokerage firm utilized by Defendant Bonan Huang.
- 55. Exhibit 47 contains address information downloaded from the website of Interactive Brokers, LLC, a brokerage firm utilized by Defendant Nan Huang.
- 56. Exhibit 48 contains address information downloaded from the website of E*Trade Financial Corporation, the parent company of a brokerage firm utilized by Defendant Nan Huang.

I declare under penalty of perjury that the foregoing is true and correct. Executed on October 23,

2015, at Philadelphia, Pennsylvania.

Dustin E. Ruta

IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

SECURITIES AND EXCHANGE COMMISSION,)
Plaintiff,)
v.) Case No. 2:15-cv-00269-MAK) (E.D.Pa.)
BONAN HUANG, NAN HUANG,)))
Defendants.)

EXPERT REBUTTAL REPORT

October 9, 2015

of

Torben Voetmann

Token Voetnom

Torben Voetmann, October 9, 2015

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I. ASSIGNMENT

- 1. I have been asked by counsel for Bonan and Nan Huang (jointly, the "Defendants") to review and respond to the opinions expressed in the Expert Report of Mr. Stephen Graham ("Graham Report") filed on September 18, 2015, and the Expert Report of Dr. Matthew D. Cain ("Cain Report") filed on September 18, 2015, both on behalf of the Securities and Exchange Commission ("SEC"). Specifically, I have been asked to:
 - a. Evaluate Mr. Graham's assumptions and methodology for determining that the credit card transaction data obtained by the Defendants from the Capital One database ("Teradata") for certain stocks (the "tainted" companies) was material to a reasonable investor and examine his correlation analysis demonstrating a predictive relationship between the transaction data and revenues;
 - b. Analyze Mr. Graham's regression analysis demonstrating a predictive relationship between the transaction data and revenue growth for tainted companies after controlling for analyst expectations and his calculation and assessment of the Defendants' trading profits as "extraordinary"; and
 - c. Examine Dr. Cain's calculations of ill-gotten gains to the Defendants.

II. QUALIFICATIONS

2. I am a Principal at The Brattle Group, a financial and economic consulting firm, and an adjunct professor at the University of San Francisco's School of Management. Prior to joining The Brattle Group, I was a visiting professor at the Wharton School of the

University of Pennsylvania where I taught in the undergraduate and graduate school of business. I have also taught for the New York Institute of Finance and Financial Modeling World. I received a Bachelor of Science degree in Business Administration from Aarhus School of Business in 1991, a Master's degree in Finance from the Aarhus School of Business in 1993, and my doctorate in Finance from Copenhagen Business School in 2000.

- 3. My academic and professional work has been in the fields of financial econometrics (*e.g.*, the application of statistical methods within an economic framework), securities prices and capital markets. I have published articles on economic and financial topics in peerreviewed journals, including the *Journal of Corporate Finance*, *Review of Finance*, and the *European Journal of Finance*, *Managerial and Decision Economics*, and *International Review of Financial Analysis*. I have also authored a chapter on event studies using regression analysis in a widely cited textbook titled Financial Modeling. In addition, I have taught undergraduate and graduate-level courses in corporate finance, corporate valuation, managerial finance, capital markets and investment banking. I am currently teaching in the MBA and MSFA programs at the University of San Francisco.
- 4. A copy of my curriculum vitae and a list of prior testimony over the last four years are attached hereto as Appendix A.

III. DOCUMENTS REVIEWED AND COMPENSATION

5. A list of the documents I have relied upon in forming my opinions is attached hereto as Appendix B. The opinions presented in this report are the result of the information available to me as of the date of this report and I reserve the right to supplement or modify

my opinions if new information becomes available.¹ I also reserve the right to respond to any additional report(s) or opinions offered by experts for the SEC.

6. The Brattle Group is being compensated for my work in this matter at my hourly rate of \$550. Staff at The Brattle Group have assisted me by performing work at my direction. All the opinions and conclusions stated in this report are my own. The Brattle Group's compensation is not affected by the outcome of this matter.

IV. SUMMARY OF OPINIONS

- 7. Below is a summary of my opinions based on my review of materials presented in the Graham Report, the Cain Report, and my knowledge and experience in finance. Overall, I find Mr. Graham's and Dr. Cain's analyses to be flawed and insufficient. The bases for this opinion are detailed in the sections that follow.
 - a. Mr. Graham's analysis rests on the assumption that only revenue data is material to a reasonable investor. This reasoning is flawed for two reasons. First, he fails to consider that the ability to predict earnings or cash flows is more relevant than forecasting revenues. Second, he fails to connect his analysis to underlying stock price movements as a proxy of information relevant to a reasonable investor. Mr. Graham's proposed research methodology contradicts standard approaches to assessing the relevance of financial forecasts in the market and does not demonstrate by an economically

I have received a production of a larger number of documents relied upon by Mr. Graham and Dr. Cain, including pdfs of the Defendants' account statements.

reliable methodology that the Defendants' transaction data was material to a reasonable investor.

- b. Mr. Graham's correlation analysis of revenues against transaction data contradicts fundamental statistical principles. First, he confuses correlation with causation, which renders his entire analysis meaningless. Second, even accepting the validity of a correlation analysis for demonstrating a predictive relationship between these two variables, he should have considered the correlation between the transaction data and stock price returns. When I examine the relationship between transaction data and stock price returns, the correlation found by Mr. Graham disappears. Therefore, Mr. Graham's correlation analysis neither proves a predictive relationship between transaction data and revenues, nor does it establish by an economically reliable methodology that the transaction data would have been material to a reasonable investor.
- c. Mr. Graham's regression analysis demonstrating the predictive power of the transaction data for revenue growth is flawed. He fails to account for the effect of the transaction data on changes in the stock price after adjusting for market risk. Once I correct for this major flaw, I find no evidence that the transaction data had any significant explanatory power for stock returns. Thus, once again, Mr. Graham's regression analysis does not establish by an economically reliable methodology that the transaction data would have been material to a reasonable investor.

- d. Mr. Graham's conclusion that the Defendants realized extraordinary trading profits between 2012 and 2014 is flawed. First, he confounds his analysis of profits with ex-post information instead of assessing on an ex-ante basis whether the Defendants' transaction data could have predicted future returns. Second, he includes trading gains realized after the companies' public revenues announcements which would not have been tainted by the Defendants' alleged information advantage. Therefore, his calculation of these trading profits and attribution to tainted stocks is simply wrong.
- e. The report by Dr. Cain is speculative at best and relies entirely on the results of the Graham Report. Therefore, his entire analysis is built on a flawed and unreliable premise that a correlation exists between revenues and the transaction data. Further, Dr. Cain's analysis overstates trading profits to the Defendants from trading in tainted stocks. Thus, his measure of ill-gotten gains is biased and incorrect.
- 8. In sum, Mr. Graham's entire opinion (and, as a result, Dr. Cain's opinion as well) rests on the following causal chain:
 - The ability to predict revenues is most material to reasonable investors;
 - There is a statistically significant correlation between the Defendants' transaction data and revenues;
 - There is a statistically significant relationship between changes in the Defendants' transaction data and changes in revenues, after controlling for analyst expectations;
 - The Defendants' transaction data thus allowed them to predict both revenues and future revenue growth; and

- Therefore, a reasonable investor would have considered the Defendants' transaction data to be material.
- 9. If any one step of this chain is incorrect, then the entire chain of logic fails. In this report, I demonstrate that each step is flawed, which refutes Mr. Graham's conclusion that the Defendants' transaction data was material to reasonable investors.
- 10. I now explain in more detail the basis for each of the opinions listed above.

V. MR. GRAHAM CONSIDERS ONLY REVENUE DATA TO BE MATERIAL TO A REASONABLE INVESTOR

- A. MR. GRAHAM FAILS TO CONSIDER THAT THE ABILITY TO PREDICT EARNINGS OR CASH FLOWS IS MORE RELEVANT THAN FORECASTING REVENUES
- 11. A reasonable investor assesses potential investments based on the total mix of available information. This includes an assessment of the investment's risks and its potential rewards. One of the most important factors for a reasonable investor to consider when examining financial statements is a company's ability to generate sufficient earnings or cash flows. The value of a company's stock is based on its future, not historical, cash flow, i.e., the market value is a forward-looking, not a backward-looking number. Consequently, current revenues are only informative to the extent they change the mix of information regarding future cash flows. Similarly, historical growth rates and revenues matter only to a reasonable investor insofar they affect expected future cash flows.
- 12. There is substantial evidence both in the academic literature and from practitioners that reasonable investors are most concerned with predicting company earnings and/or cash flows rather than revenues. The standard discounted cash flow model used to value public companies is based on projected free cash flows for a given firm, not forecasted revenues. As stated by Brealey, Myers and Allen in their leading corporate finance textbook, "only

cash flow is relevant" to making investment decisions.² Ultimately, what is most important to the health of a firm and a potential investor is the firm's ability to generate enough revenues to cover its expenses, i.e., to generate positive earnings and steady cash flows. Since earnings and cash flows are a much more direct value driver compared to revenues, they are used far more frequently in practice when constructing multiples to value companies. It is relatively rare to value a company using a revenues-based multiple unless the company has highly volatile or negative earnings.

13. Mr. Graham cites several papers supporting his reliance on revenues as the key metric considered by reasonable investors. However, these cites are taken out of context and misinterpreted. For example, Mr. Graham cites a survey by Graham, Harvey and Rajgopal (2005)³ demonstrating that, after earnings, a group of 401 financial executives identified revenues as the second most important firm performance measure. By contrast, the paper actually reveals that earnings are overwhelmingly the favorite financial metric of outsiders, with 159 of the respondents ranking it as the number one metric, relative to only 36 top ranks each for revenues and operating cash flow.⁴ Therefore, revenues clearly lag earnings in terms of perceived importance by CFOs.

Brealey, Richard, Stewart Myers and Franklin Allen, Principles of Corporate Finance, 11th Edition, New York: McGraw-Hill/Irwin (2013), Chapter 6, p. 131.

Graham, John R., Campbell R. Harvey and Shiva Rajgopal, "The Economic Implications of Corporate Financial Reporting," *Journal of Accounting and Economics*, Vol. 40 (December 2005) pp. 3-73.

Graham, Harvey and Rajgopal (2005), op. cit., September 13, 2004 version, p. 8.

14. In sum, based on my understanding that Mr. Graham only focused on revenue, which is not a measure of cash flow, it is highly unlikely in my opinion that the sales transaction data obtained by the Defendants was material to a reasonable investor.

B. MR. GRAHAM FAILS TO CONNECT HIS ANALYSIS TO UNDERLYING STOCK PRICE MOVEMENTS

- 15. Mr. Graham's correlation analysis only considers the correlation between quarterly company transaction data and actual reported revenues, not stock price returns, which would be more relevant to investors considering buying or selling securities in those companies.
- 16. There is substantial evidence in the earnings response and wider academic literature to support the use of market returns as the most important indicator of information content. For example, Beaver et al (2008)⁵ analyze the impact of analysts' earnings forecast errors and forecast revisions on stock prices, and conclude that, since these factors have significant effects on abnormal stock returns, they convey significant information content. Other empirical studies of the market impact of earnings surprises use the same model.⁶

8

Beaver, William, Bradford Cornell, Wayne R. Landsman, and Stephen R. Stubben, "The Impact of Analysts' Forecast Errors and Forecast Revisions on Stock Prices," *Journal of Business Finance & Accounting*, Vol. 35 (June/July 2008) pp. 709-740.

See, for e.g., Cornell, Bradford and Wayne R. Landsman, "Security Price Response to Quarterly Earnings Announcements and Analysts' Forecast Revisions," *The Accounting Review*, Vol. LXIV, No. 4 (October 1989) pp. 680-692.

- 17. In addition, Mr. Graham cites Rees and Sivaramakrishnan (2007), who study the effect of meeting or beating revenue forecasts on the association between quarterly returns and earnings forecast errors. Specifically, Mr. Graham cites the authors' statement that "[n]ext to earnings, revenues forecasts are perhaps the most widely followed performance metric by analysts." However, this quote is taken out of context. The authors are not using the ability to predict revenues as an indicator of material information content. Rather, they measure the joint impact of meeting earnings and revenue forecasts on abnormal returns. Therefore, the context for their statement above is the explanatory power of revenue forecasts for abnormal returns. This contradicts Mr. Graham's approach which reverses the standard methodology entirely and examines the impact of the Defendants' transaction data on revenues instead. This makes no economic sense.
- 18. Finally, Mr. Graham cites Fairfield, Ramnath and Yohn (2009)⁹ who state that "sales growth...is the fundamental driver of firm growth." ¹⁰ This statement is irrelevant to his analysis, however, since he purports to examine the market impact of the Defendants' transaction data, and market impact is not proxied by firm growth but, rather, by impact on actual traded market prices. Therefore, this cite does not support Mr. Graham's framework

⁷ Rees, Lynn and K. Sivaramakrishnan, "The Effect of Meeting or Beating Revenue Forecasts on the Association between Quarterly Returns and Earnings Forecast Errors," *Contemporary Accounting Research*, Vol. 24, No. 1 (Spring 2007) pp. 259-290.

⁸ Rees and Sivaramakrishnan (2007), op. cit., p. 259.

Fairfield, Patricia, M., Sundaresh Ramnath, and Teri Lombardi Yohn, "Do Industry-Level Analyses Improve Forecasts of Financial Performance?" *Journal of Accounting Research*, Vol. 47, No. 1 (March 2009) pp. 147-178.

¹⁰ Fairfield, Ramnath, and Yohn, (2009), op. cit., p. 149.

of testing the relationship between transaction data and revenues. Mr. Graham should instead have examined the impact of transaction data on market returns.

VI. MR. GRAHAM'S CORRELATION ANALYSIS DOES NOT ESTABLISH BY AN ECONOMICALLY RELIABLE METHODOLOGY THAT THE TRANSACTION DATA WAS MATERIAL TO A REASONABLE INVESTOR

A. MR. GRAHAM'S INTERPRETATION OF HIS CORRELATION RESULTS CONTRADICTS FUNDAMENTAL STATISTICAL PRINCIPLES

- 19. Mr. Graham asserts that, for 132 companies, the transaction data the Defendants obtained are highly correlated with company reported revenues and these correlations are statistically significant at the 95% confidence level. In addition, since the quarterly transaction data are available earlier than when the company publicly announces its quarterly revenues, he concludes that the transaction data are predictive of company reported quarterly revenues.¹¹
- 20. Mr. Graham's interpretation of his correlation results violates a basic principle in statistics. Mr. Graham claims to find a correlation or association between two variables over time. From this alleged relationship, he concludes that it is possible to predict quarterly aggregate revenues. However, confusing correlation with causation is an elementary fallacy in the field of Statistics. The fact that two variables behave similarly in a data set does not mean that one of them is causing the movement of the other. Further, merely observing trends in data does not provide any logical or statistical basis for a conclusion about what causes or explains those trends.

Graham Report, p. 19.

- 21. Mr. Graham's own report cites several well-known, reputable statistics references that warn against jumping to such inappropriate conclusions. For example, the "Reference Guide on Multiple Regression" notes that "in interpreting the results of a multiple regression analysis, it is important to distinguish between correlation and causality." Even introductory econometrics textbooks state that "unless causality can be established," an association between two variables is "rarely compelling." ¹³
- 22. In fact, Mr. Graham's correlation analysis—even if it were reliable—can at most illustrate how quarterly revenue data and quarterly sales data aggregated from the transaction database evolved over time. Concluding that this pattern was fully caused by access to the database, however, cannot possibly be justified by the statistical analysis Mr. Graham presents.
- 23. Under customary statistical procedures, Mr. Graham should also have investigated and ruled out other possible causes of the correlation he observed before attributing them to allegedly material information that a reasonable investor would consider. The generally accepted practice in the field of statistics is that, when it is not possible directly to establish causality, an investigator should explore and evaluate various hypotheses and determine which of them are consistent with the observed patterns in the data.

Rubinfeld, Daniel L., "Reference Guide on Multiple Regressions," Reference Manual on Scientific Evidence, 3rd Edition, Federal Judicial Center (2011) at p. 183.

Wooldridge, Jeffrey M., *Introductory Econometrics: A Modern Approach*, 4th Edition, South Western, Cengage Learning (2009) at p. 12.

24. In sum, Mr. Graham supposedly found a high and statistically significant correlation between quarterly revenues and transaction data. His expansive speculation about what this correlation implies has no roots in scientific principles and is therefore unreliable.

B. MR. GRAHAM'S FINDINGS OF STATISTICALLY SIGNIFICANT CORRELATION BETWEEN AGGREGATE REVENUES AND TRANSACTION DATA DISAPPEAR WHEN STOCK RETURNS ARE USED INSTEAD

- 25. Mr. Graham presents a chart for Walmart¹⁴ and 20 other companies¹⁵ that suggest a high, statistically significant correlation between quarterly company revenues and the transaction data. My Exhibit 1 instead displays the correlation between Walmart's quarterly revenues and abnormal price returns, ¹⁶ between April 2009 and July 2013, the same period presented by Mr. Graham in his chart. My exhibit shows that, while Mr. Graham finds a 0.95 (and statistically significant) correlation between Walmart's quarterly revenues and its transaction data, I find a -0.20 correlation between its quarterly revenues and abnormal returns. Exhibits 2 to 4 show further, respectively, that Walmart had only a 0.15 correlation between quarterly changes in its revenues and abnormal returns, a -0.33 correlation between its quarterly transaction data and returns, and a -0.17 correlation between changes in its transaction data and abnormal returns over the same period.
- 26. Exhibit 5 next compares, for the 21 companies selected by Mr. Graham in his Exhibit E (including Walmart), the statistical significance of the correlation between their quarterly revenues and transaction data as calculated by Mr. Graham, against the correlations I run

Graham Report, p. 14.

¹⁵ Graham Report, Exhibit E.

The abnormal return for a given revenue announcement date t is the price return for day t relative to day t-1 minus the corresponding return on the S&P 500 Total Return Index.

between their quarterly revenues and abnormal price returns from 2009 to 2014. This shows that, while Mr. Graham finds statistically significant correlations between quarterly revenues and transaction data for 20 of these 21 companies, only 2 of these companies display a significant correlation at the 5% level between revenues and abnormal returns. I obtain the same result when I correlate changes in quarterly revenues with abnormal returns instead, presented in the last three columns of Exhibit 5.

- 27. Exhibit 6 analogously compares Mr. Graham's results for these 21 companies against the correlations I run between their quarterly transaction data and abnormal returns from 2009 to 2014. I find that none of these companies display a significant correlation at the 5% level between quarterly transaction data or changes in transaction data and abnormal returns.
- 28. Exhibit 7 extends my analysis to the full set of 226¹⁷ companies for which the Defendants allegedly obtained transaction data. It shows that, while Mr. Graham finds statistically significant correlations between revenues and transaction data for 132 of these firms, only 10 (17) companies display a significant correlation between quarterly revenues (changes in quarterly revenues) and abnormal returns from 2009 to 2014. Further, only 8 (2) companies have a significant correlation between quarterly transaction data (changes in quarterly transaction data) and abnormal returns over the same period.
- 29. These results are also displayed graphically in Exhibits 8 through 11. Exhibit 8 illustrates that, of the 132 companies that display significant correlations between quarterly revenues

These are all the companies listed as "tainted" tickers in the Graham Report, Exhibit B. I find available data for my correlations for a sub-sample of these 226 firms, as displayed in column [1] of this exhibit.

and transaction data (as illustrated in Mr. Graham's Exhibit F), only 4 of those have a statistically significant correlation between quarterly revenues and returns. Exhibit 9 demonstrates similarly that only 6 of the 132 companies have a statistically significant correlation between changes in quarterly revenues and returns from 2009 to 2014. Exhibits 10 and 11 show that, respectively, only 7 (2) of the 131 companies I have found with available data for these calculations have a statistically significant correlation between quarterly transaction data (changes in quarterly transaction data) and abnormal returns from 2009 to 2014.

30. Overall, these results demonstrate a lack of a significant relationship between the transaction data and returns, a more relevant proxy for the market impact of information. Therefore, Mr. Graham's correlation analysis neither proves a predictive relationship between transaction data and aggregate revenues, nor does it establish by an economically reliable methodology that the transaction data was material to a reasonable investor.

VII. MR. GRAHAM'S REGRESSION ANALYSIS IS FUNDAMENTALLY FLAWED BECAUSE IT FAILS TO CONSIDER THE INCREMENTAL EXPLANATORY POWER OF THE DEFENDANTS' TRANSACTION DATA FOR ABNORMAL STOCK RETURNS

31. Mr. Graham's regression analysis¹⁸ purports to demonstrate a predictive relationship between the Defendant's transaction data and revenue surprises, after controlling for the information content of analyst forecasts. However, his regression analysis is unreliable at best, misleading at worst, and does not support his conclusions. I list the major flaws in his model below:

¹⁸ Graham Report, p. 22.

- a. Mr. Graham's regression analysis uses yearly changes in revenues per company-quarter as the dependent (or left-hand-side) variable. However, the vast majority of academic papers examining the impact of company-specific information use abnormal stock price returns as the dependent variable in their models. Therefore, Mr. Graham's regression results do not have any implications for the materiality of the transaction data.
- b. Mr. Graham's regression analysis does not account for any time or fixed effects. It is standard in the literature to include these effects when investigating the impact of information, for example, earnings or revenues forecasts, on the market.²⁰
- c. Finally, Mr. Graham's regression analysis does not control for any market, industry, or company-specific factors that may affect the relationship between the transaction data and revenue growth. For example, companies in different businesses like Walmart and the substantially more upscale retailer Coach may have very different patterns of credit card transaction data due to the differences in their customer demographics and associated modes of payment. Similarly, I would expect companies with different sizes and/or cost structures to display varying relationships between the transaction data and revenues. In addition, macroeconomic trends or changes in the economy could have

See, for e.g., Asquith, Paul, Michael B. Mikhail, and Andrea S. Au, "Information Content of Equity Analyst Reports," MIT Sloan Management, Working Paper 4264-02 (November 2003), and Beaver et al (2008), *op. cit*.

See, for e.g., Beaver et al (2008), *op. cit*. The standard is to model year fixed effects and/or industry fixed effects.

disproportionate effects on the Capital One transaction data and its relationship with aggregate revenues across companies. However, Mr. Graham does not adjust for any such variables that could impact the inferred relationship between transaction data and revenues or revenue growth. Therefore, his regression results are highly unreliable.

VIII. THERE IS NO EVIDENCE THAT THE DEFENDANTS' TRANSACTION DATA REFLECTED ANY ADDITIONAL INFORMATION BEYOND THAT ALREADY CAPTURED IN THE MARKET

- 32. The Defendants' alleged revenues prediction strategy based on the transaction data was to forecast revenues for a particular company for a given quarter as the transaction total for that quarter scaled by the "composite capture rate." This composite capture rate is equal to the one-year-lagged ratio of quarterly transaction data to company's quarterly revenues adjusted for the year-on-year growth in the capture rate. This alleged prediction strategy is thus based on current and historical transaction data and historical company revenues, the latter of which would have been publically available to the market.
- 33. I have been provided data by the SEC, which apparently includes all input files used by Mr. Graham for his analysis. These include the DONE files which Mr. Graham used to assemble his database of transaction data across all companies.²² I note several major issues with this raw data, however, which are summarized below:

²¹ Graham Report, Exhibit D.

Graham Report, pp. 10-12, and Exhibits C-D. I note that Mr. Graham also relied upon five RevEst files to construct his database of transaction data (Graham Report, pp. 11-12 and footnote 6). These files do not provide transaction data in the same format and across the same range of dates, however, as in the DONE files corresponding to each company. Therefore, I restrict my analysis to the set of DONE files which I am able to match with specific companies.

- a. I identified the DONE files for 143 companies based on the ticker in their file names. However, in several of these files, the historical revenues data provided for a given company did not match the actual reported revenues. Exhibit 12 illustrates an example of this major data discrepancy for Target, which had actual reported revenues in its 10-Qs of over 20 times the revenues listed in its DONE file. There is no evidence that Mr. Graham corrected for this issue in his analysis.
- b. Second, there are several DONE files in which the historical revenues data provided for a given company not only did not match with actual reported revenues but in fact corresponded with the revenues for another company. Even more importantly, the same issue arises with the reported transaction data in these files. Exhibit 13 illustrates an example of this error for Walmart, Target and TJX. In particular, the quarterly transaction data reported in the DONE files for Target and TJX are identical, and the revenues listed for all three companies are identical from March 2009 to October 2010 and match Walmart's reported revenues during this time period. There is no evidence that Mr. Graham corrected for this major data error either in his analysis, yielding his estimates of transaction data for his regression and correlation analyses highly unreliable.
- c. Third, in many DONE files, the reported composite capture rate that was used to construct the Defendants' revenues forecasts for a given quarter did not reconcile with the implied value based on the calculations presented in Mr. Graham's Exhibit D. Exhibit 14 provides an example of this for Casual Male

Retail Group, where the composite capture rate reported in the DONE file as of January 2012 is equal to 2.3%, compared to an implied value from the aforementioned calculation of only 0.6%. Once again, Mr. Graham does not acknowledge or account for this issue, implying that his analyses based upon the Defendants' revenues forecasts are potentially incorrect.

- d. There are only 50 out of the 143 aforementioned companies with reliable revenue data in the DONE files, after accounting for the data issues described above. The remaining 93 companies all list revenues in their DONE files that do not match with any revenues from Bloomberg (as reported in quarterly and annual SEC filings).
- 34. I next examine for the 143 companies their actual reported revenues across all fiscal quarters from December 2009 to January 2015,²³ and compare these with the corresponding analyst revenues and earnings forecasts,²⁴ the reported transaction data in the DONE files²⁵ and the Defendants' own revenues forecasts based on this transaction data.²⁶ Finally, I compute the price returns relative to market, or abnormal returns on the revenues announcement dates for all companies.

Actual revenues are downloaded from Bloomberg as reported in quarterly and annual SEC filings.

Analyst forecasts are compiled from BEst estimates on Bloomberg.

In each DONE file I relied upon the monthly dollar amounts of transaction data (in a column titled "trxn_amt").

Transaction data in the DONE files across companies are matched with the corresponding fiscal quarter. If a company does not have any announcement dates reported in Bloomberg during the relevant time period and also does not have any listed revenues in the DONE file that match actual reported figures, I exclude all such companies from the sample. There are 6 such companies in my sample of 143, bringing my final sample down to 137 firms.

- Exhibit 15 illustrates the difference between the Defendants' revenues forecast based on their transaction data (as presented by Mr. Graham in his Exhibit E) and the analyst revenues forecast as of Q2 2013 for Bebe. The plot on the left shows that the Defendants forecasted approximately \$125 million in revenues for Bebe for this quarter versus almost \$134 million forecasted by analysts. This suggests that the Defendants were bearish on this stock relative to the market and would enter into a strategy to sell it. The right-hand-side plot compares the analyst forecast against the actual revenues that were released for Bebe for this quarter. This shows that actual revenues came in at almost \$136 million, higher than both the corresponding analyst and Defendants' forecasts. In addition, the abnormal price return for Bebe on the revenues announcement date was a positive 0.73%. Therefore, upon release of the actual revenues figures, the Defendants' trading strategy would have changed, since the company performed better than expected, and it would thus benefit them to long the stock. This is just one example where the Defendants' trading strategy based on their revenues forecasts would have changed once actual revenues were released. Further, in this example, the analyst revenue projections were closer to the actual figures than the Defendants' forecasts, implying that the latter had no incremental explanatory power for returns.
- 36. I now explore this issue more rigorously using a statistical analysis. First, I implement Mr. Graham's regression model on my sample between Q4 2009 and Q4 2014. This is displayed in the first column of Exhibit 16. These results are qualitatively the same as Mr. Graham. In other words, using Mr. Graham's methodologically flawed regression model, the results suggest a significant relationship between change in revenues and analyst

expectations, and between change in revenues and growth in transaction data. Therefore, this supports the robustness of my sample and model.

- Next, I correct for Mr. Graham's aforementioned major methodological error, which is to use revenue growth as his dependent variable instead of abnormal price returns. The second column of Exhibit 16 displays the results of regressing abnormal price returns²⁷ on Mr. Graham's two independent variables. These results show that when abnormal returns are used instead as the dependent variable, then growth in transaction data does not have any significant explanatory power and neither do analyst expectations, since these are already reflected in the market. These results contradict Mr. Graham's findings completely and demonstrate that his methodology and conclusions are not economically reliable.
- 38. Finally, I take the same regression as displayed in the second column of Exhibit 16 but substitute out Mr. Graham's growth in transactions data variable for the yearly change in the Defendants' revenues forecast based on the transaction data ("Transaction Data Forecast"). This variable is designed to capture the incremental explanatory power of the Defendants' revenues forecasts using both the transaction data and their capture rate calculations across companies and quarters. The results of this regression are displayed in the third column of Exhibit 16. It shows that the transaction data forecast variable does not have any significant incremental explanatory power for abnormal returns, and neither, once

I measure abnormal returns for company i on each announcement date t as the price return from day t-1 to day t minus the return on the S&P 500 total return index from day t-1 to day t. This method effectively generates risk-adjusted abnormal returns relative to the market assuming all companies have a beta of one on the market index. See MacKinlay, A. Craig, "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol. 35 (March 1997) pp. 13-39 at pp. 18-19. If the announcement is after the close of market on announcement day t, the price and market returns are calculated from day t to day t+1.

again, do analyst expectations. All these results still hold when restricting my model to only those announcements between February 2012 and January 2015 (the dates between which the Defendants allegedly accessed the transaction database), displayed in Exhibit 17.

39. In sum, Mr. Graham's regression analysis does not establish by an economically reliable methodology that the transaction data would have been material to a reasonable investor beyond the mix of information already available in the market.

IX. MR. GRAHAM CONFOUNDS HIS ANALYSIS OF THE DEFENDANTS' TRADING PROFITS WITH EX-POST INFORMATION AND ERRONEOUSLY INCLUDES GAINS GENERATED AFTER REVENUE ANNOUNCEMENTS

- 40. Mr. Graham analyzes the Defendants' trading profits from their brokerage accounts from January 2012 to December 2014. He concludes that, since each Defendant's initial balance grew dramatically during this time period, yielding returns that were hundreds of times greater than corresponding returns on the market and industry index as well as far greater than the corresponding returns of top-performing hedge funds, the Defendants' investment returns were extraordinary. He further considers what portion of these trading profits was attributable to trades in tainted stocks using a database provided by Dr. Cain, and concludes that the tainted trades constituted the vast majority of gains to the Defendants. ²⁹
- 41. Mr. Graham's calculations of returns earned by the Defendants are based on the entire increase in their account balances from January 2012 to December 2014 and are presented on an ex-post basis. In other words, Mr. Graham examines the Defendants' returns with the benefit of hindsight and concludes that, since these returns were relatively high, this

²⁸ Graham Report, p. 28 and Exhibits G-H.

²⁹ Graham Report, p. 29.

indicates they must have been trading on material information. However, this analysis is confounded by ex-post information, namely the actual realization of profits after the Defendants traded on the transaction data. On the contrary, to assess whether the Defendants' information was material one has to determine on an *ex-ante* basis whether their transaction data could predict future returns. My regression analysis above demonstrates that this was not the case. Thus, Mr. Graham's interpretation of his results is fundamentally flawed.

42. Further, in comparing the Defendants' returns to various benchmarks, Mr. Graham assumes that the entirety of these returns was generated by the Defendants' information advantage. This approach is also incorrect. The Defendants allegedly used the transaction data to forecast revenues and trade on stocks ahead of their actual revenues announcements. Thus, after the public release of a given company's revenues and earnings information, there would no longer be any informational advantage to the Defendants, and any post-announcement returns from trading in this company's stock would no longer be "tainted". As a result, all such post-announcement returns should be excluded from Mr. Graham's calculations across companies. This is not what Mr. Graham does, however. In fact, Mr. Graham's approach contradicts that of Dr. Cain, who only calculates trading profits to the Defendants through earnings announcement dates specifically to avoid the issue of including post-announcement profits. Thus, Mr. Graham's approach is simply wrong. In addition, Dr. Cain's own estimates of trading profits through earnings announcement dates

³⁰ Cain Report, p. 6 and Exhibit C.

for the tainted stocks and tainted stocks with "statistical significance" are overstated as well. I explain this further in the following section.

43. Finally, Mr. Graham compares the Defendants' returns to those of hedge funds in reaching his conclusion that the former were extraordinary. However, this is an apples-to-oranges comparison given that the Defendants had far less capital at stake than the typical hedge fund investor who would face strict requirements on their net worth, for example. Therefore, Mr. Graham's comparisons and resulting conclusions are meaningless.

X. DR. CAIN'S ANALYSIS IS BUILT ON A FLAWED PREMISE THAT A CORRELATION EXISTS BETWEEN REVENUES AND THE TRANSACTION DATA

44. Dr. Cain's analysis is based entirely on Mr. Graham's flawed premise that a correlation and thus predictive relationship exists between the transaction data and aggregate revenues. In particular, Dr. Cain calculates trading profits for the Defendants through earnings announcement dates from February 2012 to January 2015, and focuses on the subset of 132 "tainted companies" that exhibit statistically significant correlations according to Mr. Graham. As I have explained above, however, Mr. Graham's correlation analysis demonstrates no reliable evidence of the materiality of the transaction data. Therefore, Dr. Cain's findings based on the set of 132 "tainted companies with statistical significance" are wholly unreliable. If Dr. Cain instead calculated the trading profits through earnings announcements for the subset of tainted companies with significant correlation between

³¹ Cain Report, Exhibit D, Panel B.

transaction data and returns, he would only produce an insubstantial estimate of "ill-gotten gains."

45. Dr. Cain also bases his calculation of the Defendants' profits on the assumption that their stock and option purchases and sales occurred on a first-in-first-out ("FIFO") accounting basis over time. Dr. Cain does not explain why he makes this assumption. He could have used the alternative accounting basis, last-in-first-out ("LIFO') since the LIFO method accounts for gains that might have accrued due to inflation of stock prices over a given period. In fact, the PSLRA majority view is that securities fraud losses should be calculated using only the LIFO method. Dr. Cain's use of the FIFO method may thus understate the cost basis and overstate corresponding profits to the Defendants if the stock prices of any of the "tainted" companies rose during the examined period.

XI. DR. CAIN'S CALCULATIONS OVERSTATE ILL-GOTTEN GAINS TO THE DEFENDANTS

46. Dr. Cain presents in Exhibit C of his report his calculation of the Defendants' trading profits through earnings announcement dates for the tainted and non-tainted companies. He states that he calculated these "ill-gotten gains" by summing the trading profits through the announcement date across a given company earnings announcement. If this sum is positive for a given Defendant around a given earnings announcement, he included profits from

See, for e.g., United States District Court, S.D. New York, In re eSPeed, Inc. Securities Litigation, No. 05 Civ. 2091 (SAS) July 13, 2005, p. 2.

United States District Court, N.D. Illinois, Eastern Division, 2005 WL 3299144 (N.D.I11) *Hill v. The Tribune Company et al.*, October 13, 2005, p. 4.

these trades in the third column of Exhibit C; otherwise he excluded these profits from the trading profits calculation.³⁴

47. This methodology is completely unfounded. It does not make sense to exclude trades that generated a total loss around a given earnings announcement; on the contrary, the only way to capture the Defendants' net trading profits accurately would be to include all trades for each earnings announcement, regardless of whether they generated total losses or profits. Any other method would skew the total calculated profits. Dr. Cain attempts to justify his approach by providing an illustrative example where a trader has three open trades of a given stock through an earnings announcement date and two of those trades earn profits (\$100 and \$200 respectively) while one generates a loss (\$50). He states that since he takes the sum of the net profit on those trades (\$250) he is correctly offsetting the gains with losses. However, this is only a partial offset. This is because, if the total profits across these three trades in the illustrative example were instead equal to -\$250, (or, in other words, they generated a total loss of \$250), Dr. Cain would not include any of this total loss in his trading profits calculation. This is clearly incorrect. Dr. Cain's methodology thus overstates the ill-gotten gains accruing to the Defendants.

XII. CONCLUSION

48. In summary, it is my opinion that Mr. Graham offers no scientific basis for his conclusions about the predictive relationship between quarterly transaction data, revenues and revenue changes. Instead, Mr. Graham's conclusions depend critically upon his unsupported

Cain Report, p. 6.

expectations and assumptions. Mr. Graham assumes erroneously that the ability to predict revenues is material to reasonable investors. He also violates a basic principle in Statistics by confusing correlation with causation and fails to investigate and account for alternate explanations for his findings. Finally, Mr. Graham's analysis and opinions are further compromised by a number of highly questionable decisions and oversights in implementing his regression analysis and calculation of the Defendants' investment returns. Overall, I find that Mr. Graham's analyses do not establish by an economically reliable methodology that the Defendants' transaction data were material to a reasonable investor beyond the mix of information already reflected in the market.

- 49. It is also my opinion that Dr. Cain's report suffers from shortcomings that render it unreliable for assessing ill-gotten gains. Specifically, Dr. Cain's analysis is deficient because he relies on the flawed and unscientific analysis by Mr. Graham. Moreover, he uses assumptions that bias his results by producing inflated ill-gotten gains.
- 50. This concludes my report.

Appendix A TORBEN VOETMANN, Ph.D.

Principal

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Dr. Voetmann work on cases that involve complex economic and financial issues involving debt, equity, and derivative securities. He is a Principal in The Brattle Group's San Francisco office and an adjunct professor at the University of San Francisco's School of Management. He is an expert in financial econometrics (i.e., the application of statistical methods within an economic framework), securities (equity, debt, preferred, and derivatives), capital markets, and market efficiency and materiality in securities fraud and misrepresentation cases. Dr. Voetmann has testified and consulted on securities matters and valuation disputes related to accounting, corporate finance, capital markets, financial institutions, insider trading, and internal investigations (including performing financial and economic analyses of "big data").

Dr. Voetmann has also testified and consulted on valuation issues related to mergers and acquisitions, appraisal actions, and other disputes involving valuation of private and public companies, illiquidity securities, employee stock options, and minority interests. He has securities experience concerning Rule 10b-5 and Section 11 and 12 class actions, including those involving options and other derivative securities. Dr. Voetmann has worked over the last fifteen years on numerous securities class action cases involving alleged misrepresentations and omissions, including *In re Xcelera Securities Litigation*, *In re Apollo Securities Litigation*, and *Munoz v. China Expert Technology, Inc.*

Dr. Voetmann has published articles on economic and financial topics in peer-reviewed journals, including the *Journal of Corporate Finance*, *Review of Finance*, and the *European Journal of Finance*, and authored a chapter on event studies in a widely cited graduate textbook on financial modeling.

EDUCATION

Ph.D., Finance, Copenhagen Business School, 2000 MS, Finance, Aarhus School of Business, 1993 BBA, Aarhus School of Business, 1991

TEACHING EXPERIENCE

University of San Francisco (2013 -)

- MBA 6019: Managerial Finance
- MBA 6204: Capital Market and Investment Banking
- MSFA 714: Corporate Finance



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The Wharton School, University of Pennsylvania (1998 – 2004)

- Undergraduate FNCE 100: Corporate Finance (Honors Section)
- Undergraduate FNCE 207: Corporate Valuation (formerly Security Analysis)
- MBA FNCE 601: Corporate Finance
- MBA FNCE 728: Corporate Valuation (formerly Security Analysis)
- MBA FNCE 899: Independent Study Project in Finance

New York Institute of Finance, NYC (2001 – 2004)

- Financial Modeling in Excel and Security Analysis
- Business Valuation

Financial Modeling World, Australia (2002)

• Executive – Financial Modeling for Corporate Finance

Copenhagen Business School (1999 – 2000)

Graduate – Seminar in Finance

RESEARCH PUBLISHED IN ACADEMIC JOURNALS

- "Returns to Acquirers of Public and Subsidiary Targets," with Jeffrey Jaffe, Jan Jindra, and David Pedersen, *Journal of Corporate Finance*, 2015, Volume 31, pp. 246-270.
- "Skill Differences in Corporate Acquisitions," with Jeffrey Jaffe and David Pedersen, *Journal of Corporate Finance*, 2013, Volume 23, pp. 166-181.
- "Discussion of the Pre and Post-Tax Discount Rates and Cash Flows: A Technical Note," with Jan Jindra, *Journal of Applied Research in Accounting and Finance (JARAF)*, 2010, Volume 5, No. 1, pp. 16–20, 2010.
- "A New Approach for Interpreting Long-Run Returns, Applied to IPO and SEP Stocks," with Jan Bo Jakobsen, *Annals of Economics and Finance*, 2005, Volume 6, pp. 337-363.
- "Top executive turnovers: Separating decision and control rights," with Robert Neumann, *Managerial and Decision Economics*, 2005, Volume 26, pp. 25-37.
- "Demand Curves for European Stocks Slopes Down Too: Evidence from Float Capitalization Index Weights in Dow Jones STOXX 50," with Robert Neumann, *Review of Finance*, 2003, Volume 7, pp. 437-457.
- "Does Ownership Matter in the Presence of Strict Anti-Activism Legislation? Evidence from Equity Transactions in Denmark," with Robert Neumann, *International Review of Financial Analysis*, 2003, pp. 157-171.



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- "Post-Acquisition Performance in the Short and Long Run: Evidence from the Copenhagen Stock Exchange 1993 1997," with Jan Jakobsen, *European Journal of Finance*, 2003, Volume 9, pp. 323-342.
- "Free Float Index Weights of KFX Experiences from the Dow Jones Europe STOXX Index," with Robert Neumann, *Finans/Invest*, May 2001, pp. 23-27.
- "The Performance of Danish Bidding Firms," with Jan Jakobsen, Finans/Invest, December 2000, pp. 10-13.
- "CEO Turnovers and Corporate Governance," with Robert Neumann, Finans/Invest, December 1999, pp. 20-23.
- "Are the Stock Markets Integrated or Segmented?" Finans/Invest, April 1992, pp. 23-25.

OTHER PUBLISHED RESEARCH AND ARTICLES

- "Delaware Appraisal Case Reaffirms Valuation Premium for S Corporations," with Yvette Austin Smith and David McKnight, *Deal Points The Newsletter of the Mergers and Acquisitions Committee*, Volume 20, Fall 2015.
- "Event Studies," with Simon Benninga, Chapter in *Financial Modeling*, 2008, 3rd Edition; 2014 4th Edition.
- "Key Complexities In High-Frequency Trading Litigation," with Zach Ziliak, Pavitra Kumar, *Law360*, June 2014.
- "Rural Metro Redefines Investment Banks' Role In M&A," with Yvette Austin Smith, *Law360*, March 2014.
- "Avoiding Pitfalls in the Litigation of Business Valuation," with Gary Stahlberg, Ioannis Gkatzimas, and Bryan Plotts, in PLI Course Handbook, *Basics of Accounting for Lawyers 2013: What Every Practicing Lawyer Needs to Know*, Chapter 7, pp. 181-213.
- "Institutionelle og strategiske investorers betydning: resultater fra ¶29 meddelelser," with Robert Neumann, *Finansielle splinter*, 2000, pp. 65-71.

RESEARCH UNDER REVIEW AND WORKING PAPERS

"Private Class Action Litigation and Cross-Listing: The Chinese Reverse Mergers and IPOs," with Jan Jindra and Ralph A. Walkling, October 2014. Revise and Resubmit to *Quarterly Journal of Finance*.



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"Changes in the Bid-Ask Components Around Earnings Announcements: Evidence from the Copenhagen Stock Exchange," First draft May 1999. Last revised October 1999.

ACADEMIC HONORS AND AWARDS

The Dean's Office of the Wharton School officially recognized my teaching efforts for the course Security Analysis (Corporate Valuation) in the fall of 2000 and Corporate Finance in the Spring of 2001.

The article "Skill Differences in Corporate Acquisitions," with Jeffrey Jaffe and David Pedersen, *Journal of Corporate Finance*, 2013, Volume 23, pp.166-181 was awarded the 2014 NJBIA Bright Idea Award by the Stillman School of Business at Seton Hall University and the NJPRO Foundation, the public policy research affiliated of the New Jersey Business and Industry Association (NJBIA). The paper was identified as one of the top 10 manuscripts from over 216 publications.

CONFERENCE (ACCEPTED PAPERS)

Financial Management Association, "Skills in Corporate Acquisitions," October 2009, Reno, Nevada.

- Eastern Finance Association Conference, "Mergers and Persistence: A Test of Differential Skill in Corporate Finance," May 2009, Washington, D.C.
- Mid-Atlantic Research Conference in Finance (MARC), "Mergers and Persistence: A Test of Differential Skill in Corporate Finance," March 2009, Philadelphia, Pennsylvania.
- Financial Management Association "Implementing Float Capitalization Index Weights Price and Volume Effects, October 2002, San Antonio, Texas.
- European Financial Management Association "Implementing Float Capitalization Index Weights Price and Volume Effects," June 2002, London, United Kingdom.
- Financial Management Association, "Implementing Float Capitalization Index Weights Price and Volume Effects," June 2002, Copenhagen, Denmark.
- Financial Management Association, "Volatility-Adjusted Performance: An Alternative Approach to Interpret Long-Run Returns," October 2001, Toronto, Canada.
- Financial Management Association International, "Does Ownership Matter in the Presence of Strict Anti-Activism Legislation? Evidence from Equity Transactions in Denmark," June 2001, Paris, France.



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European Financial Management Association, "Volatility-Adjusted Performance: An Alternative Approach to Interpret Long-Run Returns," June 2000, Athens, Greece.

Financial Management Association International, "Volatility-Adjusted Performance: An Alternative Approach to Interpret Long-Run Returns," June 2000, Edinburgh, Scotland.

European Finance Association Annual Meeting, "CEO Turnover and Corporate Governance: Evidence from the Copenhagen Stock Exchange," August 1999, Helsinki, Finland.

Workshop on Corporate Finance, "Volatility-Adjusted Performance: An Alternative Approach to Interpret Long-Run Returns," Copenhagen, May 1999, Copenhagen, Denmark.

Financial Management Association International, "Post-Acquisition Performance in the Short and Long Run: Evidence from the Copenhagen Stock Exchange 1993-1997," June 1998, Barcelona, Spain.

PROFESSIONAL EXPERIENCE

2013 – Present	Principal, The Brattle Group
2012 - 2013	Managing Director, Finance Scholars Group
2002 - 2012	Principal, Cornerstone Research

Managerial Expertise

- Directed consulting services with teams of up to thirty or more consultants
- Managed case involving multiple stakeholders, including multiple clients, experts, and lawyers
- Directed client relationships and the production of case deliverables under tight deadlines
- Developed consulting fee estimates and work plans for multi-million dollar projects

Expertise in Financial Econometrics

- Consulted, as an expert, and extensive experience with the event study methodology and damages estimation in securities litigations. Addressed non-standard issues that have arisen in assessment of materiality, including:
 - Isolating the value of information announcements when there are confounding announcements and/or events;
 - o Estimating the value of relevant information that is revealed gradually;
 - General issues of materiality and price inflation when markets are potentially information inefficient;



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- Estimating materiality through event study when model structure is changing.
 e.g., volatility of abnormal return is changing, as happened during the recent financial crisis;
- Event studies with securities that are thinly traded;
- Developing event-studies using high-frequency data to measure price impact;
- Establishing causality and issues that arise for damages estimations; and,
- Appropriate inflation ribbon estimates when continuous disclosure obligations are not met and the impact of concealment is changing.

Expertise in Finance

- Estimated fair market valuation of various businesses under different assumptions. Developed and modeled pro forma financial statements (profit and loss statements, balance sheets, and cash flow statements), costs, and profits over multiple years.
- Assessed reasonableness of, and modified, financial forecasts in light of market and industry conditions, including trend analysis.
- Estimated fair value of various businesses under different assumptions and in different industries.
- Assessed illiquidity and private company discounts, and lack of marketability in valuation of private and public companies.
- Reviewed accounting, financial, and competitive position of acquired companies to assess reasonableness of acquisition prices. Applied various valuation methods, including discounted cash flows (DCF), earnings multiples, comparables, and ratio analysis.

SELECTED CONSULTING EXPERIENCE

Securities

- Testified and consulted on numerous cases related to class certification issues, loss causation, and damages. Analyzed the reaction of the defendant's stock price to information disclosures in 10b-5 and Section 11 and 12 classes.
- Consulted on materiality, loss causation, and damages in securities cases involving stocks, bonds, mutual funds, mortgage-backed and asset-backed securities. Assessed economic losses and loss causation for companies and investors in a range of industries, including banking, finance, real estate, oil and gas, software, media and telecommunications, retail, pharmaceuticals, biotechnology and transportation.



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• Consulted on the market impact of short sales and investigated possible insider trading in various settings. Managed insider trading case through trial.

Valuation and Mergers & Acquisitions

- Consulted on valuation analyses of hedge funds, high-technology companies (including startup ventures), international companies, and real estate ventures in a range of contexts, including breach of contract, mergers and acquisitions, initial public offerings, and employee compensation; and employee stock options.
- Consulted for a private company on appraisal matter and assessment of fair value. Analyzed
 valuation approaches such as DCF and multiples. Favorable trial verdict by Delaware vicechancellor.
- Testified and consulted for private companies on valuation issues in several industries.
- Consulted and engaged as an expert to value an illiquidity private company.
- Consulted on valuing the liquidity of a small foreign company trading over the counter.

Asset Management, Hedge Funds and Private Equity

- Consulted for large asset management firm to analyze the impact of errors in an algorithmic trading strategy. Performed valuation of equity and bonds on customer accounts.
- Consulted for several financial institutions to investigate the consistency of regulatory reporting of data by financial institutions, evaluated profitability and risk of investment strategies of hedge funds, and addressed damages.
- Consulted for private equity firms to analyzed investment and financing strategies, competition, structure of funds, drivers of value, and compensation issues.
- Consulted for partners of hedge funds to perform valuation of venture capital management companies. Analyzed investment strategies, performance, and valuation of portfolio companies of venture capital funds.

Risk Analysis/Financial Modeling

Consulted for large financial institution to analyzed hedging strategies by counterparties of
total return swap contracts, analyzed the sensitivity of asset-backed securities values to
interest rates, valued cash flows from management of pension fund assets using Monte Carlo
techniques, summarized risk characteristics of a portfolio of derivative securities, and assessed
risk characteristics of reference obligations in a credit default swap.



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EXPERT WITNESS EXPERIENCE

- *United States of America v. Wells Fargo Bank. N.A. and Kurt Lofrano*, Case No. 12 Civ. 7527 (JMF). Report June 2015, Deposition September 2015.
- Long, et al. v. Morgan Stanley Trust, N.A., Case No. 13-CV-3624. Report March, 2014.
- *In the Matter of the Arbitration of Tom Patterson v. GEICO.* Report March, 2014. Deposition February 2015. Arbitration March 2015.
- Charles P. Haggarty and Gina M. Haggarty et al. v. Wells Fargo Bank, N.A., Case No. 3:10-cv-02416-CRB. Declaration August, 2012.
- *Munoz v. China Expert Technology, Inc.*, Case No. 07-CV-10531 (AKH)(S.D.N.Y.). Report, February, 2012. Deposition, March 2012.

PROFESSIONAL EDUCATION, CUSTOMIZED COURSE OFFERINGS, AND OTHER ACTIVITIES

- Designed, developed, and instructed an Executive course titled "Financial Modeling for Corporate Finance" for Financial Modeling World, Australia, 2002.
- Designed, developed, and instructed an Executive course title "Financial Modeling in Excel and Security Analysis" for FT New York Institute of Finance, 2001-2002.
- Valuation consultant on the development of the web-based course "Business Valuation" for FT New York Institute of Finance, 2001.
- Referee for Journal of Empirical Corporate Finance and International Review of Financial Analysis

PROFESSIONAL AFFILIATIONS

- American Bar Association (non-lawyer member)
- Bar Association of San Francisco
- Western Finance Association



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Appendix B

Documents Relied Upon by Torben Voetmann

Document Title, Bates Number	Document Date
Legal Pleadings	
SEC v. Bonan Huang, et al., Defendant Bonan Huang's Supplemental Answers to Plaintiff's Second Set of Interrogatories	September 9, 2015
SEC v. Bonan Huang, et al., Defendant Nan Huang's Supplemental Answers to Plaintiff's Second Set of Interrogatories	September 9, 2015
SEC v. Bonan Huang, Nan Huang, Complaint for Violations of the Federal Securities Laws	January 21, 2015
United States District Court, N.D. Illinois, Eastern Division, 2005 WL 3299144 (N.D.II1) <i>Hill v. The Tribune Company et al.</i>	October 13, 2005
United States District Court, S.D. New York, In re eSPeed, Inc. Securities Litigation, No. 05 Civ. 2091 (SAS)	July 13, 2005
Expert Reports	
Expert Report of Stephen Graham, with Exhibits	September 18, 2015
Expert Report of Matthew D. Cain, Ph.D., with Exhibits	September 18, 2015

Produced Documents

SEC-CAIN-EPROD-000000001-9; SEC-GRAHAM-EPROD-000000001-496

Academic Articles & Public Press

Cornell, Bradford and Wayne R. Landsman, "Security Price Response to Quarterly Earnings Announcements and Analysts' Forecast Revisions," *The Accounting Review*, Vol. LXIV, No. 4 (October 1989)

MacKinlay, A. Craig, "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol. 35 (March 1997)

Asquith, Paul, Michael B. Mikhail, and Andrea S. Au, "Information Content of Equity Analyst Reports," MIT Sloan Management, Working Paper 4264-02 (November 2003)

Graham, John R., Campbell R. Harvey and Shiva Rajgopal, "The Economic Implications of Corporate Financial Reporting," *Journal of Accounting and Economics*, Vol. 40 (December 2005)

Rees, Lynn and K. Sivaramakrishnan, "The Effect of Meeting or Beating Revenue Forecasts on the Association between Quarterly Returns and Earnings Forecast Errors," *Contemporary Accounting Research*, Vol. 24, No. 1 (Spring 2007)

Beaver, William, Bradford Cornell, Wayne R. Landsman, and Stephen R. Stubben, "The Impact of Analysts' Forecast Errors and Forecast Revisions on Stock Prices," *Journal of Business Finance & Accounting*, Vol. 35 (June/July 2008)

Fairfield, Patricia, M., Sundaresh Ramnath, and Teri Lombardi Yohn, "Do Industry-Level Analyses Improve Forecasts of Financial Performance?" *Journal of Accounting Research*, Vol. 47, No. 1 (March 2009)

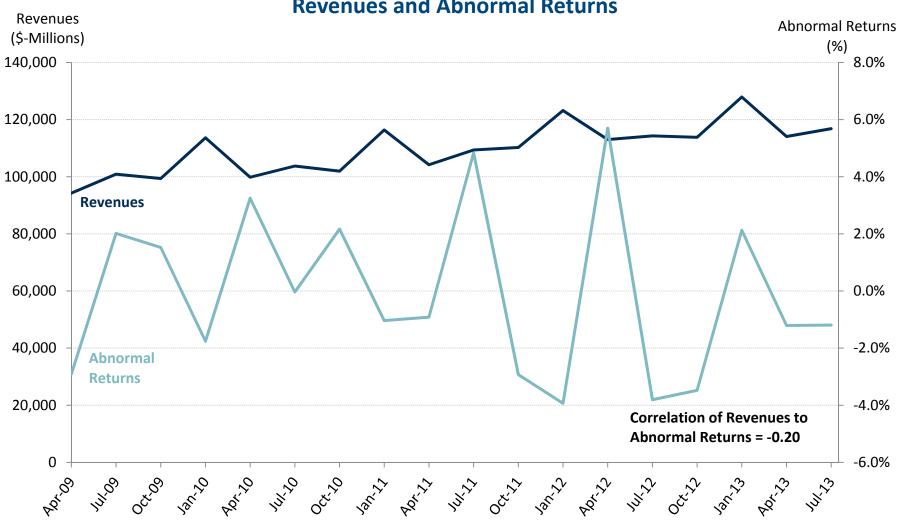
Wooldridge, Jeffrey M., *Introductory Econometrics: A Modern Approach*, 4th Edition, South Western, Cengage Learning (2009)

Rubinfeld, Daniel L., "Reference Guide on Multiple Regressions," Reference Manual on Scientific Evidence, 3rd Edition, Federal Judicial Center (2011)

Brealey, Richard, Stewart Myers and Franklin Allen, *Principles of Corporate Finance*, 11th Edition, New York: McGraw-Hill/Irwin (2013)

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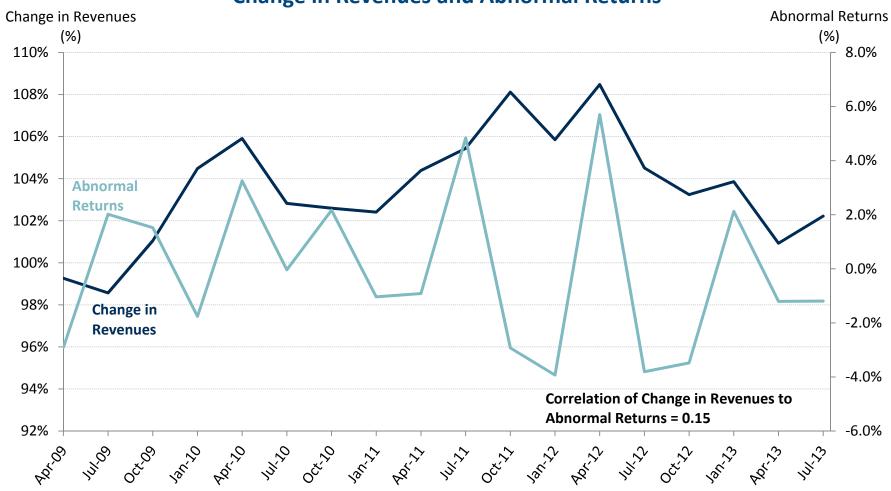




Source: Bloomberg LP.

Note: Abnormal Returns are calculated as Price Return - SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index.

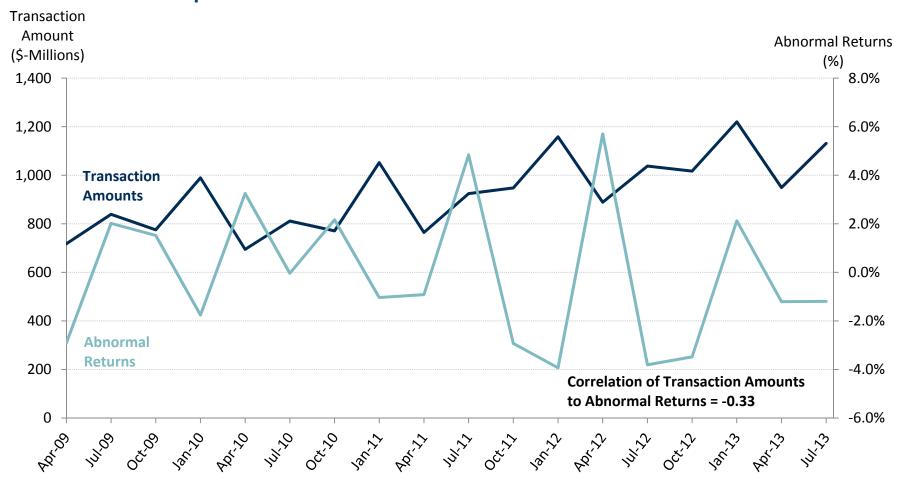
Exhibit 2
Walmart ("WMT")
Change in Revenues and Abnormal Returns



Source: Bloomberg LP.

Note: Abnormal Returns are calculated as Price Return - SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index. Change in Revenues are calculated as Revenue_{α 1, t}-1 for a given quarter and year t.

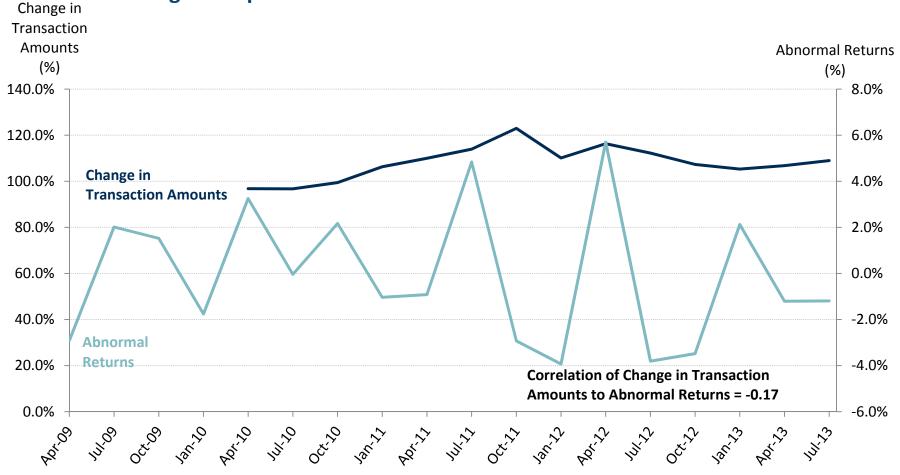
Exhibit 3
Walmart ("WMT")
Capital One Transaction Amounts and Abnormal Returns



Source: Bloomberg LP; DONE file ("EPROD-000000403").

Note: Abnormal Returns are calculated as Price Return - SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index. Quarterly Capital One Transaction Amounts are sourced from the DONE file.

Exhibit 4
Walmart ("WMT")
Change in Capital One Transaction Amounts and Abnormal Returns



Source: Bloomberg LP; DONE file ("EPROD-00000403").

Note: Abnormal Returns are calculated as Price Return - SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index. Quarterly Capital One Transaction Amounts are sourced from the DONE file. Change in Capital One Transaction Amounts is calculated as $Transactions_{q1, t-1}$ for a given quarter and year t.

Exhibit 5

Comparison of Correlations for Select Companies (Walmart and Graham Exhibit E)

Q1 2009 to Q4 2014

		Graham Correlations			Voetmann (
		Revenues to		Revenues to			Change in Revenues to	
Ticker	Company Name	Cap One Txn Amt	# Observations	Abnormal Returns	P-Value	# Observations	Abnormal Returns	P-Value
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
AAP	ADVANCE AUTO PARTS INC	*	24	-0.2582	0.2231	24	-0.0897	0.6767
ACOM	ANCESTRY COM INC	*	12	0.1892	0.5560	8	-0.5714	0.1390
BEBE	BEBE STORES INC		24	0.4462 *	0.0288	24	-0.0376	0.8617
BIG	BIG LOTS INC	*	24	0.2148	0.3136	24	-0.4862 *	0.0160
BWLD	BUFFALO WILD WINGS INC	*	24	0.0598	0.7813	24	0.0280	0.8967
СОН	COACH INC	*	24	-0.3707	0.0746	24	0.2206	0.3002
DTG	DOLLAR THRIFTY AUTOMOTIVE GRP I	*						
FB	FACEBOOK INC	*	11	0.3059	0.3603	8	-0.4229	0.2965
GES	GUESS INC	*	24	-0.0196	0.9277	24	0.2971	0.1586
GMAN	GORDMANS STORES INC	*	15	0.1456	0.6047	11	0.1186	0.7284
GNC	G N C HOLDINGS INC	*	16	-0.2437	0.3630	13	-0.0923	0.7643
М	MACYS INC	*	24	0.2864	0.1748	24	0.1843	0.3887
PETS	PETMED EXPRESS INC	*	24	-0.0507	0.8142	24	0.3523	0.0914
PLCE	CHILDRENS PLACE INC	*	24	-0.2803	0.1846	24	0.4949 *	0.0139
RH	RESTORATION HARDWARE HLDGS INC	*	6	-0.3948	0.4385	2	-1.0000	1.0000
SBUX	STARBUCKS CORP	*	24	0.3632	0.0811	24	0.4018	0.0516
SCVL	SHOE CARNIVAL INC IN	*	24	-0.4779 *	0.0182	24	-0.1787	0.4035
SIX	SIX FLAGS ENTERTAINMENT CORP	*	19	-0.2784	0.2485	15	0.4434	0.0978
TXRH	TEXAS ROADHOUSE INC	*	24	0.0669	0.7561	24	0.0725	0.7363
URBN	URBAN OUTFITTERS INC	*	24	0.0032	0.9883	24	-0.0100	0.9630
WMT	WAL MART STORES INC	*	24	-0.1162	0.5886	24	-0.0671	0.7553
Number	of Companies with	20		2			2	

Source: Bloomberg LP; Expert Report of Stephen Graham dated Sept. 18, 2015.

Note: The Bloomberg fields PX_LAST and SALES_REV_TURN were used to retrieve data for closing price and revenues, respectively. The number of observations and correlation estimates were subject to data availability from Bloomberg.

- * indicates statistical significance of correlations at the 5% level.
- [1] Tickers in Graham Report, p. 14 and Exhibit E.
- [2] Company name of each ticker.
- [3] Indicates statistically significant correlations as reported in Graham Report, Exhibit B.
- [4] Number of observations for each ticker when calculating correlations between Revenues and Abnormal Returns.
- [5] Correlations between Revenues and Abnormal Returns. Abnormal Returns are calculated as Price Return SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index.
- [6] P-value for correlations shown in [5].
- [7] Number of observations for each ticker when calculating correlations between Change in Revenues and Abnormal Returns.
- [8] Correlations between Change in Revenues and Abnormal Returns. Abnormal Returns are calculated as Price Return SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index. Change in Quarterly Revenues is calculated as Quarterly Revenue_{01,17} / Quarterly Revenue_{01,17} for a given quarter and year t.
- [9] P-value for correlations shown in [8].

Exhibit 6

Comparison of Correlations for Select Companies (Walmart and Graham Exhibit E)

Q1 2009 to Q4 2014

		Graham Correlations			Voetmann (Correlations		
				Capital One			Change in Capital One	
		Revenues to		Transaction Amounts			Transaction Amounts	
Ticker	Company Name	Cap One Txn Amt	# Observations	to Abnormal Returns	P-Value	# Observations	to Abnormal Returns	P-Value
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
AAP	ADVANCE AUTO PARTS INC	*	16	-0.2907	0.2747	12	-0.3555	0.2568
ACOM	ANCESTRY COM INC	*	9	-0.1868	0.6303	9	0.1091	0.7799
BEBE	BEBE STORES INC		15	0.3398	0.2153	11	0.2353	0.4860
BIG	BIG LOTS INC	*	13	-0.0994	0.7467	9	-0.1908	0.6229
BWLD	BUFFALO WILD WINGS INC	*	14	-0.2798	0.3326	10	0.0564	0.8770
COH	COACH INC	*	15	-0.1083	0.7009	11	0.0880	0.7969
DTG	DOLLAR THRIFTY AUTOMOTIVE GRP I	*						
FB	FACEBOOK INC	*	7	0.1388	0.7666	7	-0.6354	0.1252
GES	GUESS INC	*	13	-0.0080	0.9793	9	-0.5674	0.1110
GMAN	GORDMANS STORES INC	*	8	0.3399	0.4101	8	0.2862	0.4920
GNC	G N C HOLDINGS INC	*	13	-0.3507	0.2401	13	-0.0158	0.9593
M	MACYS INC	*						
PETS	PETMED EXPRESS INC	*	15	-0.1856	0.5077	11	0.0932	0.7852
PLCE	CHILDRENS PLACE INC	*	12	0.3226	0.3064	8	0.3808	0.3520
RH	RESTORATION HARDWARE HLDGS INC	*						
SBUX	STARBUCKS CORP	*	14	-0.1871	0.5218	10	0.3985	0.2540
SCVL	SHOE CARNIVAL INC IN	*	13	-0.3890	0.1889	9	-0.0957	0.8065
SIX	SIX FLAGS ENTERTAINMENT CORP	*	13	-0.2346	0.4404	13	0.3249	0.2788
TXRH	TEXAS ROADHOUSE INC	*	14	-0.2626	0.3645	10	-0.0847	0.8159
URBN	URBAN OUTFITTERS INC	*	15	-0.0657	0.8159	10	-0.0901	0.8045
WMT	WAL MART STORES INC	*	18	-0.3256	0.1873	14	-0.1652	0.5724
	of Companies with ally Significant Correlations:	20		0			0	

Source: Bloomberg LP; Expert Report of Stephen Graham dated Sept. 18, 2015; DONE files.

Note: The Bloomberg field PX_LAST was used to retrieve data for closing price. The number of observations and correlation estimates were subject to data availability from Bloomberg and the DONE files.

- [1] Tickers in Graham Report, p. 14 and Exhibit E.
- [2] Company name of each ticker.
- [3] Indicates statistically significant correlations as reported in Graham Report, Exhibit B.
- [4] Number of observations for each ticker when calculating correlations between Capital One Transaction Amounts and Abnormal Returns.
- [5] Correlations between Capital One Transaction Amounts and Abnormal Returns. Abnormal Returns are calculated as Price Return SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index.
- [6] P-value for correlations shown in [5].
- [7] Number of observations for each ticker when calculating correlations between Change in Capital One Transaction Amounts and Abnormal Returns.
- [8] Correlations between Change in Capital One Transaction Amounts and Abnormal Returns. Abnormal Returns are calculated as Price Return SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index. Change in Capital One Transaction Amounts is calculated as Transactions_{q, t-1} for a given quarter and year t.
- [9] P-value for correlations shown in [8].

^{*} indicates statistical significance of correlations at the 5% level.

Exhibit 7
Summary of Correlations for 226 Companies
Q1 2009 to Q4 2014

Description	Number of Companies for which Correlation was Calculated [1]	Number of Companies with Statistically Significant Correlations [2]	Percentage of Significant Companies [3]
Graham - Correlation of Revenues to Transaction Amount	226	132	58.41%
Voetmann - Correlation of Revenues to Abnormal Returns	212	10	4.72%
Voetmann - Correlation of Change in Revenues to Abnormal Returns	204	17	8.33%
Voetmann - Correlation of Capital One Transaction Amounts to Abnormal Returns	131	8	6.11%
Voetmann - Correlation of Change in Capital One Transaction Amounts to Abnormal Returns	131	2	1.53%

Source: Bloomberg LP; Expert Report of Stephen Graham dated Sept. 18, 2015; DONE files.

Note: The Bloomberg fields PX_LAST and SALES_REV_TURN were used to retrieve data for closing price and revenues, respectively. The number of observations and correlation estimates were subject to data availability from Bloomberg and the DONE files.

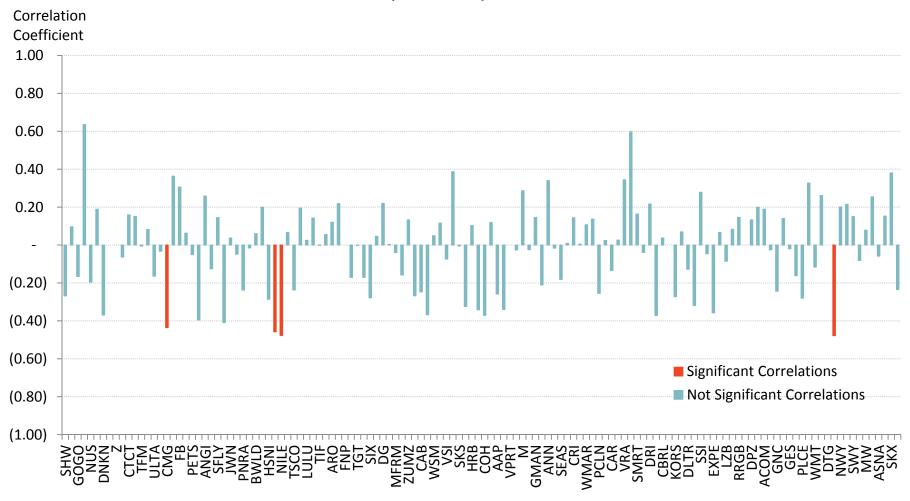
- [1] Number of companies for which correlation was calculated.
- [2] Number of companies with statistically significant correlations at the 5% level.
- [3] = [2] / [1].

Exhibit 8

Correlation of Revenues to Abnormal Returns for 132 Companies in Graham Exhibit F

4 Significant Companies

Q1 2009 to Q4 2014

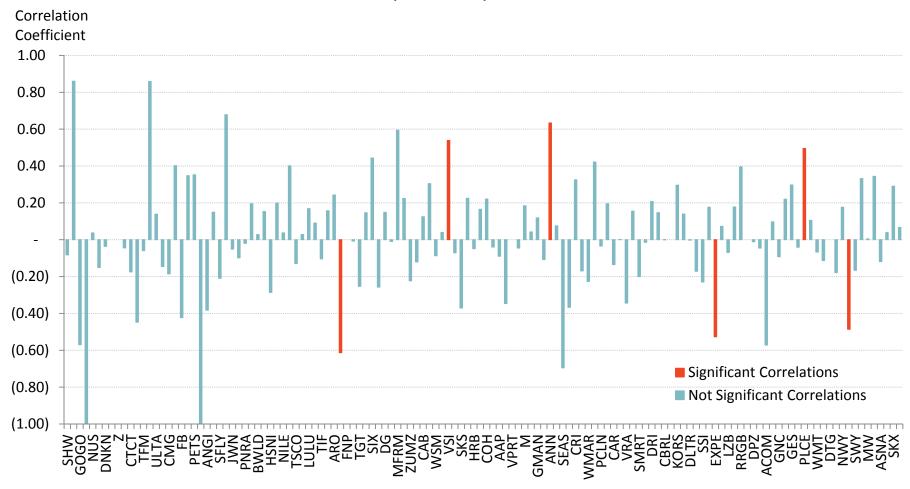


Source: Bloomberg LP; Expert Report of Stephen Graham dated Sept. 18, 2015, Exhibit F.

Note: Abnormal Returns are calculated as Price Return - SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index. Statistical significance is measured at the 5% level.

Exhibit 9

Correlation of Change in Revenues to Abnormal Returns for 132 Companies in Graham Exhibit F
6 Significant Companies
Q1 2009 to Q4 2014

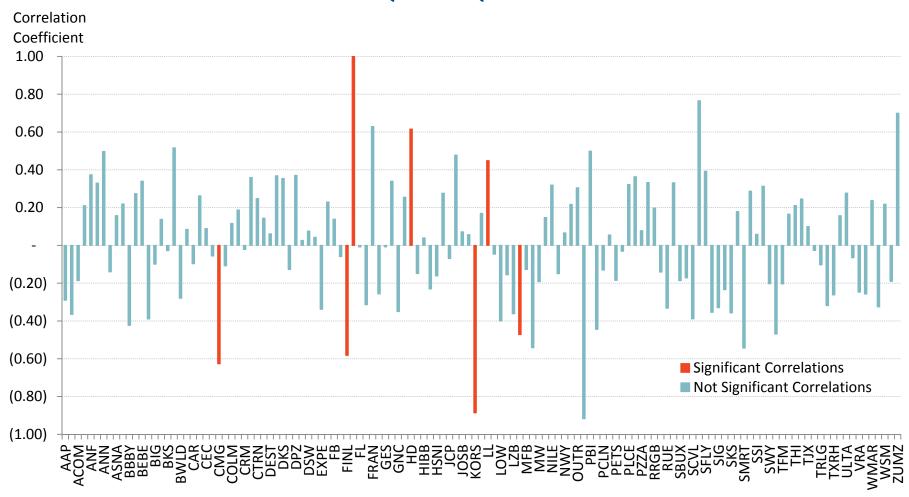


Source: Bloomberg LP; Expert Report of Stephen Graham dated Sept. 18, 2015, Exhibit F.

Note: Abnormal Returns are calculated as Price Return - SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index. Change in Revenues is calculated as Revenue_{α_1, t} / Revenue_{α_1, t} for a given quarter and year t. Statistical significance is measured at the 5% level.

Exhibit 10

Correlation of Capital One Transaction Amounts to Abnormal Returns for 131 Companies
7 Significant Companies
Q1 2009 to Q4 2014



Source: Bloomberg LP; DONE files.

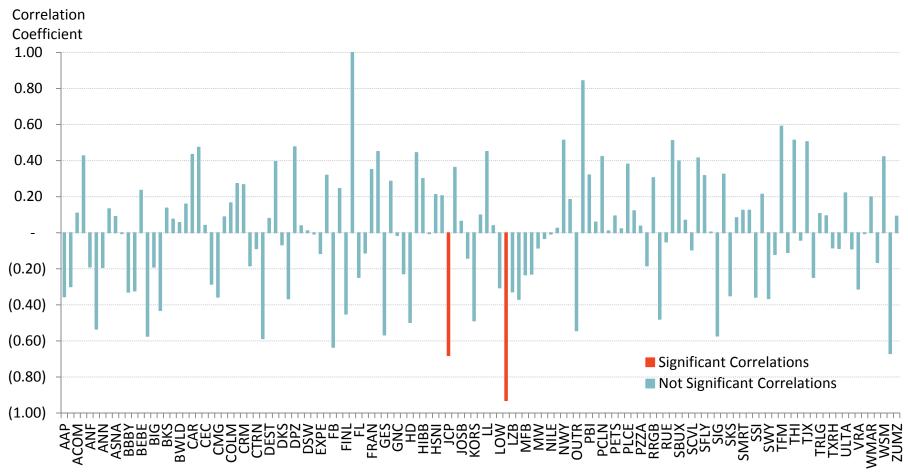
Note: Abnormal Returns are calculated as Price Return - SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index. Quarterly Capital One Transaction Amounts are sourced from the DONE files. Statistical significance is measured at the 5% level.

Exhibit 11

Correlation of Change in Capital One Transaction Amounts to Abnormal Returns for 131 Companies

2 Significant Companies

Q1 2009 to Q4 2014



Source: Bloomberg LP; DONE files.

Note: Abnormal Returns are calculated as Price Return - SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index. Quarterly Capital One Transaction Amounts are sourced from the DONE files. Change in Capital One Transaction Amounts is calculated as $Transactions_{a1,t-1}$ for a given quarter and year t. Statistical significance is measured at the 5% level.

EXHIBIT 12

TO BE FILED UNDER SEAL

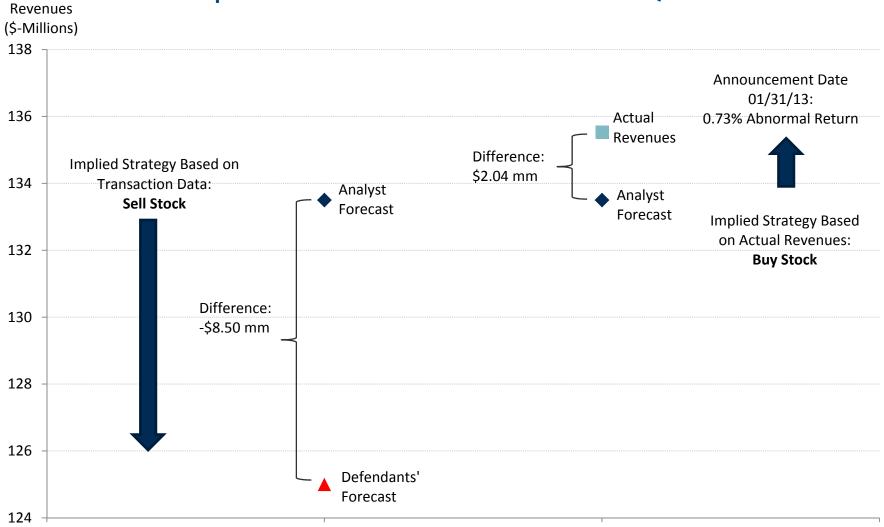
EXHIBIT 13

TO BE FILED UNDER SEAL

EXHIBIT 14

TO BE FILED UNDER SEAL

Exhibit 15
Comparison of Revenues Forecasts for Bebe for Q2 2013



Source: Bloomberg LP; Expert Report of Stephen Graham dated Sept. 18, 2015, Exhibit E.

Note: Abnormal Returns are calculated as Price Return - SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index.

Exhibit 16
Regression Results with Available Data between Q4 2009 to Q4 2014

		Corrected - Independen	t Variable: Abnormal Returns
	Graham Regression Model	[1]	[2]
[A] Intercept	-0.029212 (-1.68)	-0.0120105 (-0.79)	-0.0114517 (-0.52)
[B] Analyst Expectations	0.9429844 (60.06)	0.0006139 (0.05)	0.0131924 (0.64)
[C] Growth in Capital One Transactions	0.0898492 (6.61)	0.0119338 (1.02)	
[D] Transaction Data Forecast			-0.0017629 (-0.49)
[E] Number of Observations	1,044	998	495
[F] Adjusted R-squared	0.8308	-0.0007	-0.0031

Source: Bloomberg LP; DONE files; Expert Report of Stephen Graham dated Sept. 18, 2015.

Note:

Regressions are based on data availability from Q4 2009 to Q4 2014.

Regression model does not include fixed effects as per Graham Report, p. 22. T-statistics are in parentheses.

Abnormal Returns are calculated as Price Return - SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index.

- [1] Regression for the independent variable Abnormal Returns on Analyst Expections and Growth in Capital One Transactions.
- [2] Regression for the independent variable Abnormal Returns on Analyst Expections and Transaction Data Forecast.
- [B] Analyst Expectations is calculated as Analyst Revenue Forecast_{a1,t} / Reported Sales_{a1,t-1} for a given quarter and year t.
- [C] Growth in Capital One Transactions is calculated as Transactions_{α_1, t} / Transactions_{α_1, t -1} for a given quarter and year t.
- [D] Transaction Data Forecast are calculated as Defendants' Revenues Forecast_{q1, t}/Defendants' Revenue Forecast_{q1, t-1} for a given quarter and year t.

Exhibit 17

Regression Results with Earnings Announcements between February 16, 2012 to January 31, 2015

			Corrected - Independe	nt Variable: Abnormal Returns
		Graham Regression Model	[1]	[2]
[A] Ir	ntercept	-0.120088 (-7.20)	-0.0036848 (-0.14)	-0.0051464 (-0.18)
[B] A	Analyst Expectations	1.076936 (61.56)	-0.0154967 (-0.62)	0.0073814 (0.28)
	Growth in Capital One Fransactions	0.0357766 (2.13)	0.0210694 (0.78)	
[D] T	Fransaction Data Forecast			-0.0009324 (-0.24)
[E] N	Number of Observations	370	349	303
[F] A	Adjusted R-squared	0.9507	-0.0039	-0.0063

Source: Bloomberg LP; DONE files; Expert Report of Stephen Graham dated Sept. 18, 2015.

Note:

Regressions are based on data availability for announcement dates from February 16, 2012 to January 31, 2015 (inclusive).

Regression model does not include fixed effects as per Graham Report, p. 22. T-statistics are in parentheses.

Abnormal Returns are calculated as Price Return - SPXT Index Return. The SPXT Index is the S&P 500 Total Return Index.

- [1] Regression for the independent variable Abnormal Returns on Analyst Expections and Growth in Capital One Transactions.
- [2] Regression for the independent variable Abnormal Returns on Analyst Expections and Transaction Data Forecast.
- [B] Analyst Expectations is calculated as Analyst Revenue Forecast_{q1, t} / Reported Sales_{q1, t-1} for a given quarter and year t.
- [C] Growth in Capital One Transactions is calculated as Transactions_{α_1, t} / Transactions_{α_1, t} for a given quarter and year t.
- [D] Transaction Data Forecast are calculated as Defendants' Revenues Forecast_{q1, t}/Defendants' Revenue Forecast_{q1, t}-1 for a given quarter and year t.

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                UNITED STATES DISTRICT COURT
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               EASTERN DISTRICT OF PENNSYLVANIA
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    SECURITIES AND EXCHANGE )
6
    COMMISSION,
              Plaintiff,
                               ) CASE NO.
8
                                ) 2:15-CV-00269-MAK
    VS.
9
    BONAN HUANG, et al.,
10
              Defendants.
11
12
13
14
15
          VIDEOTAPED DEPOSITION OF TORBEN VOETMANN
16
                  FRIDAY, OCTOBER 16, 2015
17
18
19
20
21
                      BEHMKE REPORTING AND VIDEO SERVICES, INC.
22
                                           BY: SHARI COHEN, RPR
23
                                    160 SPEAR STREET, SUITE 300
24
                               SAN FRANCISCO, CALIFORNIA 94105
25
                                                 (415) 597-5600
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8
           Videotaped Deposition of TORBEN VOETMANN at
9
    Securities and Exchange Commission, 200 Vesey Street,
10
    New York, New York commencing at 10:07 A.M., FRIDAY,
11
    OCTOBER 16, 2015 before Shari Cohen, Registered
12
    Professional Reporter pursuant to Notice of Videotaped
13
14
    Deposition.
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1
    APPEARANCES OF COUNSEL:
 2
    FOR PLAINTIFF:
 3
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        BY: JASON SOMENSATTO, ATTORNEY AT LAW
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        Telephone: (212) 796-6341
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        Email: eingoglia@morvillolaw.com
20
21
    ALSO PRESENT:
22
        CHYHE BECKER
23
        DANIEL SALEMI, VIDEOGRAPHER
24
25
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PROCEEDINGS 1 2 THE VIDEOGRAPHER: Here begins DVD number one in the deposition of Dr. Torben Voetmann in 3 the matter of Securities and Exchange 4 Commission versus Bonan Huang, et al. in the 5 United States District Court for the Eastern 6 7 District of Pennsylvania, case number 2:15-cv-00269-MAK. 8 9 Today's date is October 16, 2015. time on the video monitor is 10:07 a.m. 10 11 video operator today is Dan Salemi, Behmke 12 Reporting And Video Services, Inc., 116 Spear 13 Street, Suite 300, San Francisco, California. 14 This video deposition is taking place at 15 200 Vesey Street, Suite 400, New York, New York and was noticed by Christopher R. Kelly of U.S. 16 17 Securities and Exchange Commission. Counsel please voice identify yourselves 18 19 and state whom you represent. 20 MR. KELLY: My name is Christopher R. 21 Kelly. I represent the plaintiff the Securities and Exchange Commission in this action and with 22 23 me today are my colleagues David L. Axelrod and 24 Chyhe Becker. 25 MR. SOMENSATTO: My name is Jason

Somensatto from the law firm of Morvillo, LLP 1 2 representing the defendants and here with me is Eugene Ingoglia from our firm. 3 THE VIDEOGRAPHER: The court reporter 4 today is Shari Cohen certified shorthand 5 reporter with Behmke Reporting and Video 6 7 Services, Inc. Will the court reporter please swear in the witness. 8 9 TORBEN VOETMANN, called as a witness, 10 having been duly sworn by the Notary Public, was examined and testified as 11 12 follows: 13 EXAMINATION BY 14 MR. KELLY: 15 Good morning, Dr. Voetmann. Before we 0. get started, I just want to go over a couple of ground 16 17 rules. I understand you've been deposed before so this should sound familiar. As you know, there's a court 18 19 reporter here that's taking down your testimony 20 stenographically. If you could please when you answer 21 my questions do so verbally so that we have a complete 22 record. 23 Similarly, when I ask you a question, 24 please try to let me finish my question before you 25 answer and I'll do the same. I will try to let you

```
1
    finish your answer before I ask my next question; is
 2
    that okay?
 3
           Α.
                  Sounds good.
                  To the extent you don't understand a
 4
           0.
 5
    question of mine, please ask me to rephrase it or
6
    otherwise explain what's causing you the confusion.
    To the extent you answer my question, I'll take that
 8
    to understand that you understood the question as
9
    asked; is that fair?
                  That's fair.
10
           Α.
11
           0.
                  Finally, this is not an endurance test.
12
    To the extent you would like to take a break, I'll do
13
    what I can to accommodate that request. The only
14
    issue is if there is a question pending I'll ask you
15
    to finish that and then we can talk about whether it
16
    makes sense to take a break at that point in time; is
    that fair?
17
18
           Α.
                  That's good.
19
                  Could you please state your name for the
           0.
20
    record?
21
                  My name is Torben Voetmann.
           Α.
22
           Q.
                  What's your date of birth?
23
                  March 2, '68.
           Α.
24
                  Home address?
           Q.
25
                  110 Fernwood Drive, San Francisco,
           Α.
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```
1
    California 94127.
 2
                  Dr. Voetmann, how did you become engaged
 3
    to work on this matter?
           Α.
                  I was contacted by counsel for
 4
 5
    defendants.
                  Approximately when was that?
 6
           0.
 7
           Α.
                  Approximately a month ago.
 8
                  Prior to being engaged to work on this
           Q.
9
    matter, did you know either of the defendants in this
10
    case?
11
                  I did not.
           Α.
12
           Q.
                  Prior to being engaged to work on this
13
    matter, did you know any of the defense counsel?
                  I did not.
14
           Α.
                   MR. KELLY: Let's mark this as Exhibit 2.
15
                   (Exhibit 2, Notice of Deposition of
16
17
           Defendants' Expert, marked for Identification.)
                  Dr. Voetmann, you have been designated
18
           Q.
19
    to serve as an expert in this case by defendants; is
    that correct?
20
21
           Α.
                  Yes.
22
           Q.
                  You're appearing today for a deposition,
    is that also true?
23
24
           Α.
                  Correct.
25
                  Is this the Notice of Deposition under
            Q.
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1 which you are appearing for a deposition today? 2 Α. I believe it is. Dr. Voetmann, what did you do to prepare 3 0. for today's deposition? 4 I reviewed my report that I had submitted 5 Α. 6 in this case and I reviewed the reports by Mr. Graham and Dr. Cain and I met with counsel. Other than the three reports you 0. 9 identified, did you review any other documents in preparing for your testimony here today? 10 11 I looked at some of the additional Α. documents that I had cited and relied on. 12 13 Those documents you refer to, those are 0. 14 the documents set forth in Appendix B in your report? 15 Α. That's correct. Approximately how long did you meet with 16 0. 17 counsel to prepare for today's deposition? We met yesterday about five hours, five 18 Α. 19 or six hours. Apart from that five hour meeting 20 0. 21 yesterday, did you spend any other time with either 22 talking with or meeting with defense counsel to 23 prepare for today's deposition? 24 No, I did not. Α. 25 Specifically who did you meet with Q.

1	yesterday?
2	A. I met with Jason and Gene.
3	Q. Without going into specific
4	communications with defense counsel, could you
5	describe what you did yesterday?
6	A. We did a couple of things. We walked
7	through my report and we also looked at some
8	commercials from Capital One and American Express and
9	then we just discussed my report and my opinions.
10	Q. When you say you looked at commercials,
11	are you talking about television commercials or you're
12	talking about
13	A. I believe they were television
14	commercials of Capital One and American Express.
15	Q. Why did you do that?
16	A. I'm not quite sure. I think this is a
17	case that involves as I understand it Capital One
18	credit card credit transactions so I want to
19	understand the Capital One credit card.
20	Q. How many commercials did you watch
21	yesterday?
22	A. Just a couple.
23	Q. I think I understood your testimony, but
24	those were television commercials or different type of
25	advertisement?

11

1	A. It was on YouTube, but I believe they are			
2	television commercials.			
3	Q. Had you seen those commercials prior to			
4	seeing them with defense counsel?			
5	A. The Capital One I had seen before on			
6	television, but the American Express I had not seen			
7	before.			
8	Q. Did anything about those commercials			
9	strike you as relevant to this matter?			
10	A. Not in particular other than			
11	understanding the company in which the data at issue			
12	in this case was Capital One, but other than that, no.			
13	Q. Are those commercials at all relevant to			
14	the opinions you are offering in this case?			
15	A. No.			
16	Q. So Dr. Voetmann, what's your definition			
17	of materiality?			
18	MR. SOMENSATTO: Objection to form. You			
19	can answer.			
20	A. My definition of materiality is to			
21	measure if certain information would cause a			
22	statistically significant price change or price			
23	impact.			
24	Q. So under your definition of materiality,			
25	there would need to be a statistically significant			

1 effect on the price of a security in order for information to be material? 2 Α. Correct. 3 Dr. Voetmann, is that legally the 4 0. 5 definition of materiality in Securities and Exchange Commission insider trading cases? 6 MR. SOMENSATTO: Objection to form. Α. I'm not sure of the legal statute or the 8 legal definition. My definition is used based on my 9 understanding of the analysis that is done to 10 11 determine whether certain information was causing a 12 price impact. 13 Dr. Voetmann, is a piece of information 0. material if it alters the total mix of information in 14 15 the market place? Potentially, but one would have to 16 Α. examine the total mix of information to determine 17 whether that piece of information is relevant and 18 19 carry any weight on impact. How do you go about doing that? 20 Q. 21 Α. Depends on the circumstances of the 22 analysis you are trying to undertake. 23 How would you if you were trying to 0. 24 determine whether a particular piece of information is 25 material, how would you analyze that?

1	A. It's a very broad question, but if I			
2	think about the report I put forward here in this			
3	case, the analysis I have undertaken is to determine			
4	whether or not the information that defendants had			
5	from Capital One could be statistically connected to a			
6	price impact on the securities in which they had this			
7	information so the type of analysis I put forward in			
8	my report is the type of analysis I would undertake to			
9	determine materiality.			
10	Q. So let me ask you, Dr. Voetmann, is			
11	revenue information included within the total mix of			
12	information to investors?			
13	A. I think revenue would be a part of the			
14	total mix of information that may be relevant to an			
15	investor.			
16	Q. What other aspects are there in the total			
17	mix of information to investors?			
18	A. Right so if I understand your question			
19	you're asking me what are some of the other factors or			
20	I don't understand your question?			
21	Q. Let me rephrase it. Based on your			
22	understanding, what types of information do investors			
23	look to when determining whether or not to make an			
24	investment?			
25	MR. SOMENSATTO: Objection to form.			

1 It very much depends on the type of Α. 2 investment they are looking at, but if you're talking in general terms just looking at investing in a 3 security, just to mention some factors, what investor 4 might look at is, you know, earnings, cash flows, 5 different definitions of factors that might impact 6 cash flows as well as other risk factors for the 8 security that they are looking at. 9 So you mentioned earnings. How do 0. companies make money? 10 11 MR. SOMENSATTO: Objection to form. 12 Α. It's a very broad question. Are you 13 talking about net income, are you talking about cash 14 flows or what do you mean by making money? 15 Let's focus on earnings. What are the 0. 16 components of earnings? 17 Α. So the general definition of earnings is to think about earnings from a net income perspective. 18 19 Earnings is revenues net of expenses net of other 20 costs like financing costs and depreciations and so 21 you have a measure of earnings, operating income and 22 then you have taxes and after taxes you have earnings or net income. 23 24 Q. What are the components of cash flow? 25 So the components of cash flow includes Α.

1 earnings, but in addition to that there's other 2 components you have to factor in such as working 3 capital and non cash items such as depreciation, amortization as well as investments and capital 4 5 expenditures. Let me make sure I understand your 6 0. 7 testimony. Does depreciation appear in a company's 8 cash flow when it reports cash flows? 9 So we have to be careful about definitions. Are you talking about the cash flow 10 11 statement or you're just talking about cash flows that 12 a company generates in general? 13 Dr. Voetmann, you had testified that 0. 14 depreciation was a component of cash flow? 15 Α. Yes. I'm just trying to understand how 16 0. 17 depreciation effects cash flows within a company? Α. Okay. So, for example, depreciation is 18 19 an accounting measure of the use of an asset so it's 20 not a real cash expense so in order to determine the 21 true cash flow of a company, you would add back 22 depreciations. You had defined -- withdrawn. 23 0. Voetmann, what causes stock prices to go either up or 24 25 down?

MR. SOMENSATTO: Objection to form. You may answer.

- A. Again, it's a very broad question. There could be a host of factors that may make a company's stock price go up and down so you have to examine all those different factors to determine what may impact the company's stock price to go up and down.
- Q. Can you please identify a few of those factors for us?
- A. Sure. So what comes to mind as an example of something that might be disclosed to the market, for example, if a company announces that they had improved their profit margins, in other words, they might have improved their management of expenses and the market might view that as a profitable increase in their cash flows, hence they would -- I would expect the price to go up.
- Q. What if a company releases its quarterly revenue information and it just says our revenue for this quarter is X, how would you expect that to effect the price of the stock?
- A. In order to measure an impact on the stock, my expectation is that you would compare that release of earnings X to a, for example, consensus estimate by analysts and if they are in line with

expectations of analysts, I would have an expectation that there may not be a price response.

If on the other hand, they surprise the market by improving earnings above expectations, you might see a positive price impact likewise if they are less than expectations, you might see a decline in price impact.

- Q. What if the company releases information that its quarterly revenues increased as compared with the prior quarter, would you expect that to result in an increase in the company's price?
 - A. Not necessarily.
 - Q. Why is that?

- A. Because you have to look at whether the market understood why it increased in their revenues from one quarter to the next and the market may have already factored in that increase.
- Q. What if the company releases news that's it's quarterly revenues increased as compared to the same quarter the prior year, you know, would you expect that to influence the company's stock price?
- A. Not necessarily. Again, you have to look at whether or not the market has actually already factored that information into the price.
 - Q. If I had asked a series of questions with

1 respect to whether or not the revenues decreased 2 rather than increased, would your answers be the same? 3 Α. Yes. So Dr. Voetmann, let's assume that you 4 0. 5 received non public information as to what a company 6 has not yet reported revenues were for a given quarter that happened to be consistent with analyst 8 expectations. Is it your testimony that a reasonable 9 investor would not like to know that information in making a decision to buy or sell a security? 10 11 MR. SOMENSATTO: Objection to form. 12 Α. Are you asking a broad question or you're 13 asking specifically to this case? 14 Q. I'm asking a broad question. 15 Okay. So sorry, can you rephrase or Α. 16 repeat the question? 17 MR. KELLY: Can you read it back. (Record read.) 18 19 MR. SOMENSATTO: Same objection. 20 Α. If the question is whether this 21 information non public is in line with the analyst 22 expectations, in other words, define that as similar 23 to analyst expectations, identical, I would expect that that's already built into the market price 24 because the market is already aware of an expectation 25

of what earnings might be released so it's not clear whether or not that would be material information for a reasonable investor.

- Q. You say it's not clear whether it would be reasonable. Are you saying that you can't determine one way or the whether that's material or are you saying that because the information is consistent with analyst expectations, you would not expect a stock price movement and therefore the information is not material?
 - MR. SOMENSATTO: Object to form.
- A. What I'm saying is you could undertake an analysis similar to what I have done in this case as I explained in my report where you try to quantify the marginal information that comes out of this non public information and then determine whether that information is value relevant for an investor and if you look at the case here and the analysis I have done here in particular for the data at issue in this case with the Capital One data, this was not value relevant for the price impact and therefore not material to an investor.
- Q. When you say value relevant, Dr.

 Voetmann, are you saying that it needs to effect the price of the stock or are you saying that it's not

1 valuable to the investor to know that information? 2 I'm saying that when you look at the total mix of information, you have to determine 3 whether that piece of information gets any weight such 4 that it would cause a change in the stock price. 5 6 So let's just go back to -- I'm not sure 0. 7 you answered my initial question. Let me reframe the 8 question slightly. Let's assume that you're good 9 friends with a CFO at a company and that CFO has access to not yet released revenue information on the 10 11 company and let's also assume for the time being that there are not any legal implications to this. 12 13 If that friend of yours, this CFO, gives 14 you a call and says a day before revenue information 15 is announced for a year, I know you're interested in my company, I know you're considering buying 16 17 securities or selling securities in the company, let me tell you that the analyst expectations of what our 18 19 revenue will be is spot on. You know that no one else 20 knows this, but what they are expecting is in fact 21 true and that's what we are going to report tomorrow. 22 Is that information that you as an investor would like to know? 23 24 MR. SOMENSATTO: Objection to form. 25 Α. I think it's fair to say that -- well,

1 two things. One it's not clear, first of all, whether 2 that information would make a price impact or price change because you had access to that information. 3 That said, I think any reasonable investor or any 4 investor would take any information they could get on 5 their hands in your hypothetical if it's legal to 6 obtain this kind of information, any investor would 8 take any information they could get their hands on to 9 evaluate the value of a company or a security. They would then look at the total mix of 10 11 information and determine which factor or which piece 12 of information have more weight and it's not clear if 13 I'm getting information about revenues that is exactly 14 in line with expectations that that information would 15 carry much weight on whether or not I would purchase that security. 16 17 0. So let me factor out the price impact piece. I understand that that's important to your 18 19 analysis. I'm asking you as an investor deciding whether or not to make an investment decision. 20 21 MR. SOMENSATTO: Objection to form. 22 MR. KELLY: I haven't finished my 23 question yet. 24 0. So you as an investor would you like to 25 know advanced information -- withdrawn.

define advanced. If you look back at my hypothetical, would you as an investor like to have access to the information directly from the CFO calling you and telling you non public information about what that company's revenue is going to be?

MR. SOMENSATTO: Objection to form.

- A. As I think I answered, as an investor I would like to get my hands on any information I could get my hands on and I would evaluate that information to see if it's relevant as I'm making my buy or sell decision.
- Q. Dr. Voetmann, the not yet reported revenue information is in fact a piece of information that would be relevant; is that correct?
- A. I didn't say it was relevant, I said it's information I would get my hands on and information I might evaluate, but I would have to determine whether it's a relevant piece of information that drives my decision to buy or sell a security.
- Q. Let me ask you this, Dr. Voetmann. In that same conversation the CFO told you he's about to have a McDonald's cheeseburger. You had said an investor would like to know any piece of information. Is the not yet reported revenue information more relevant than the fact that the CFO is about to have a

1 McDonald's cheeseburger? 2 MR. SOMENSATTO: Objection to form. Again, it's a hypothetical. If we are 3 Α. talking about buying McDonald's, maybe that 4 5 information is relevant, I'm not sure, but again, I would take all information into consideration and the 6 fact that the CFO ordered a cheeseburger may not be relevant and I would discard the information as not 8 9 relevant. 10 0. So, Dr. Voetmann, let me make sure I understand your answer. Is it your testimony that it's 11 12 possible that one purchase of a McDonald's 13 cheeseburger may be relevant to an investor 14 considering whether or not to invest in McDonald's? 15 MR. SOMENSATTO: Objection to form. It's a hypothetical we are talking about. 16 Α. 17 My statement was as an investor I would consider all information I had available to me as I'm judging and 18 19 deciding what's relevant on deciding what security I buy or sell. 20 21 0. I think we can move on for now. Might 22 revisit this topic. Actually let me -- I have got a 23 couple of hypotheticals. So, Dr. Voetmann, grounding 24 your definition of materiality and stock price 25 movement so let's assume for the time being that you

receive non public information that a company's not yet reported revenues were triple what analysts were expecting for a quarter. Let's further assume that when the revenue figure was announced publicly, the stock price did not move.

Is it your testimony that the non public information that a company's revenues were tripled analyst expectations is not the type of information that a reasonable investor would like to know in making a decision to buy or sell a security because upon release the price of the security did not move?

MR. SOMENSATTO: Objection to form.

- A. In this case let me make sure I understand the question correctly. You're saying that the revenue non publicly was triple consensus and there is no price impact?
 - Q. Correct.

A. This is a good example of the analysis one needs to undertake to understand what factor in the host of factors that impacts a security is relevant so it could be you are dealing with a company where revenue is not really what drives the company, but there are other factors that maybe have bigger impacts on cash flows so if you are tripling revenues, but it has no cash flow impact, it may not be

1 surprising that the price did not move in this 2 hypothetical so again you have to really disentangle the information and determine based on the total mix 3 of information what factor is the drive to stock price 4 and if I could connect this to this case, you know, I 5 have seen no evidence in the analysis done by Mr. 6 Graham where he attempts to try to explain what factors actually drive the stock price or connecting 8 9 the transaction data from Capital One to the stock 10 price movements. 11 So, Dr. Voetmann, in your answer you 0. 12 indicated that the earnings of certain companies are 13 driven by different factors. What types of companies -- withdrawn. 14 15 For what types of companies does revenue 16 drive the profitability of those companies? 17 MR. SOMENSATTO: Objection to form. It's not a question I directly have 18 Α. 19 analyzed in this case, but you can think of companies 20 where revenue might be more important than others, for 21 example, it's possible when you look at technology 22 companies where their investments are so large that 23 they have no cash flow, they might have negative cash 24 flows that revenue is a more important factor. Again, 25 it's a question I have not examined here.

1	Q.	Let's think about have you heard of the	
2	company Chipo	otle?	
3	A.	Yes.	
4	Q.	What is that company?	
5	A.	It's where I get my burritos on a regular	
6	basis.		
7	Q.	So how does Chipotle make their money?	
8		MR. SOMENSATTO: Objection to form.	
9	Q.	Withdrawn. How does Chipotle as a	
10	company make	its money?	
11		MR. SOMENSATTO: Objection to form.	
12	A.	The way I see it, it's a restaurant chain	
13	of sort that	sells high end fast food Mexican food and	
14	so by selling	g food they make money.	
15	Q.	So Chipotle makes money through its	
16	sales?		
17	A.	It's part of how they make money, yes.	
18	Q.	How else does Chipotle make money?	
19		MR. SOMENSATTO: Objection to form.	
20	A.	I haven't analyzed Chipotle specifically,	
21	but in genera	al terms Chipotle may increase its cash	
22	flow through the way it's able to run its business and		
23	finance its k	ousiness.	
24	Q.	Do you know as a fact that they do that	
25	or you're jus	st speculating?	

1 Α. Like I said, it's not a question I've 2 analyzed specifically for today. As you sit here today, the primary way 3 that Chipotle makes its money is through sales, 4 5 correct? MR. SOMENSATTO: Objection to form. 6 7 Α. I said it's one of the ways it makes 8 money, but it's not unreasonable to believe that it's 9 also making money or cash flows through the way it's running their business as well as financing its 10 11 business. 12 0. What other ways as you sit here today can 13 you that Chipotle makes its money through sales? 14 MR. SOMENSATTO: Objection to form. 15 Α. I just stated the way it runs its business, the way it's managing it's day-to-day 16 17 business. By that I mean how it manages expenses, how it manages its capital investments as well as the way 18 19 it's financing its business. 20 0. Do you know the way in which Chipotle 21 does any of those things as you sit here today? 22 MR. SOMENSATTO: Objection to form. 23 No, it's not a question I've analyzed for Α. 24 this case here today. 25 So let's assume that you receive non Q.

1 public information that a company has not yet reported 2 revenues were tripled for what an analyst expected for a given quarter and let's further assume that when the 3 revenue figure was publicly announced the stock price 4 did not move and let's also assume that the same time 5 6 of revenue figure was publicly announced the company announced that it was incurring costs in closing down an unprofitable line of business. 8 9 Is the non public information that a 10 company's revenues were tripled an analyst's 11 expectations the type of information an investor would 12 like to know to make a decision to buy or sell the 13 security? MR. SOMENSATTO: Objection to form. 14 I believe I stated earlier an investor 15 Α. would examine all that information and determine what 16 17 is relevant as it's putting its weight on what decision to buy or sell a security. In your 18 19 hypothetical, you have tripling the revenue above 20 consensus which might mean you expect a price 21 increase, but if I heard you correctly, you also have 22 a closure of some business. 23 A closure of an unprofitable line of 0. 24 business? Unprofitable line of business so an 25 Α.

investor would have to examine both of those factors to understand what might impact one's decision to buy or sell that security.

- Q. So to try to close this out, a lot of my -- let's go back to my hypothetical about the CFO who you're friends with who knows about the company's non public revenue figures and is happy to share that with you. As an investor, do you want to know that information?
 - MR. SOMENSATTO: Objection to form.
- A. I think any investor would want to know all the information they could get access to, but that doesn't mean that information is material or relevant as they are making their decision on buying and selling. In your hypothetical from before, there is legal information so having access to it I would still evaluate as a rational and reasonable investor whether or not this is material information for me to base my decision to buy or sell a security.
- Q. So I mean frankly I don't think you answered my question. It's a yes or no question. Would you like to have from -- you got direct access to the CFO. Would you like to know and be able to assess whether or not to buy a security in a given company based on its not reported actual revenue

1 information? 2 MR. SOMENSATTO: Objection to form. I don't know that you could answer yes or 3 Α. As an investor, I would want all 4 no to that. information I could get access to, but I would still 5 evaluate all that information before I make a decision 6 whether to buy or sell a security. Let me ask you this, Dr. Voetmann. Ιf 9 you don't have access to that information, you can't 10 analyze it, correct? 11 Α. If I didn't have access to the non public information that the CFO has, I would not be able to 12 13 analyze it. All else being equal, it's better to have 14 0. 15 more information than less, correct? MR. SOMENSATTO: Objection to form. 16 17 Α. You want all the information you could have access to, but just having more information by 18 19 itself doesn't mean you are in a position to make a 20 better decision or making the right decision to 21 whether you want to buy or sell a security. You still 22 want to bring it back and analyze whether that 23 information in fact has any relevance and as I have 24 seen in this case when I look at the analysis done by 25 Mr. Graham, he's not attempted to connect the

1 transaction data to price impacts so he's not 2 established whether there's a statistically significant relationship between the two when in fact 3 this information was material to a reasonable 4 investor. 5 It is true though, Dr. Voetmann, that 6 0. 7 without knowing the not yet reported revenue 8 information, you can't determine whether or not you 9 want to make a purchase or sale of that security based on that information? 10 11 MR. SOMENSATTO: Objection to form. 12 Α. I can still without knowing that 13 information I could still evaluate any other public available information to make a decision whether I 14 15 want to buy or sell the security and have an understanding of what drives that security whether I 16 17 would buy it or sell it. But in that total mix of information, you 18 0. 19 are not including the not yet reported actual revenue 20 information that no other investor has access to, 21 correct? 22 Α. In your hypothetical I didn't include it, 23 but even if I had included it, it may be such a small 24 piece of the total mix of information and one would

have to examine whether that marginal information

would be relevant.

- Q. So your testimony is one would have to examine. Would you like to be able to do that analysis or would you rather shut your eyes and say CFO, don't tell me the information, I'm better off not knowing it?
 - MR. SOMENSATTO: Objection to form.
- A. Again, it's a hypothetical. In this hypothetical I would take any information I could get my hands on and evaluate. Any investor would consider all information that's available to them as they are making their decision, but if you are a reasonable investor, you would understand how to contextualize the information to the extent of what's relevant and what's not relevant and understand what information to put weight on as you're making your decision whether you want to buy or sell that security.
 - Q. Dr. Voetmann, what's an event study?
- A. An event study is a study where you attempt to measure a price -- one form of event study is a study where you attempt to measure the price impact on new information released to the market.
 - Q. How do you perform an event study?
- A. There's a number of different ways you can perform an event study. Traditionally you perform

an event study by comparing the actual price impact price return to the expected return to information that's being released.

- Q. Under what conditions are event studies most useful?
 - MR. SOMENSATTO: Objection to form.
- A. So event studies as I've used it in the past and as I understand event studies, it's methodology where you attempt to measure kind of an ex-post analysis where you are looking at information that was released to the market and you want to try to understand whether that information caused a material price change or not so in this case you're looking at information that was released and you're comparing that information to what the expectation was and you can then determine whether or not the information released caused a significant price change.
- Q. Dr. Voetmann, what are confounding events?
- A. So confounding events is when you have an event, for example, an earnings announcement, but the earnings announcement also includes other pieces of information other than earnings so you have multiple pieces of information in the announcement.
 - Q. Are event studies most useful by

1 eliminating confounding events? 2 MR. SOMENSATTO: Objection to form. Not necessarily. Event studies is to 3 Α. measure the price impact. Depending on the purpose of 4 5 the event study and what you are trying to accomplish, you may need to control for confounding events and 6 7 this is a good example of when I examined Mr. Graham's 8 analysis when he measured the return on the 9 investments he had as far as I could tell in his study done no attempt to control for confounding factors. 10 11 Did Mr. Graham perform an event study? 0. 12 Α. He didn't perform a classical event 13 study. In fact, I don't think he performed an event study, but he did include in his analysis a measure of 14 15 returns earned by defendants, but he did not control whether those returns that were earned were due to 16 17 confounding information or whether those returns were only and purely driven by the marginal information 18 19 from Capital One transaction data. 20 0. Dr. Voetmann, is it your testimony that 21 Mr. Graham should have done an event study to 22 determine how much profit the defendants made in this 23 case? 24 MR. SOMENSATTO: Objection to form. 25 Α. That's not my testimony. As I've

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explained in my report, I believe that Mr. Graham have ignored a number of confounding factors in his attempt to determine whether or not the marginal value from the Capital One transaction data was relevant so he's not been able to establish whether the transaction data caused a statistically significant price impact. Dr. Voetmann, did Mr. Graham at all 0. analyze whether or not the Capital One transaction data caused a stock price movement at all? In his correlation and regression Α. analysis he in my opinion failed to analyze that. He did not include anything related to the stock price impact as such that he was unable to establish whether a reasonable investor would make a buy and sell decision based on this information. In his last piece of his analysis, he attempted to show the realized return that the defendant earned and what I'm stating here is that in that analysis when he is stating what they earned, he's not controlling for whether those earnings are caused by as you pointed out confounding factors or whether it's caused by the marginal revenue data that the defendants had access to. MR. KELLY: Please mark this as Exhibit 3. (Exhibit 3, Document, marked for

Identification.) 1 2 I notice have Exhibit 2 and 3, but was 3 there an Exhibit 1? Exhibit 1 is a different deposition. 4 Q. 5 Α. Okay. Dr. Voetmann, could you please identify 6 0. 7 this document? 8 Α. It's a chapter 17A from a book. I don't 9 -- the title is on the last page, it's Litigation Service Handbook from 2002 I believe. 10 11 0. Have you seen this document before? 12 Α. I know I have seen the Litigation Service 13 Handbook before. I possibly have seen this chapter as well. 14 15 Please turn to page 9? 0. 16 Α. Okay. 17 Q. I'll turn your attention to the top of page 9 where it says an event study in this context 18 19 proves most useful under the following three conditions. There's two conditions and then the third 20 21 condition is the parties can unambiguously identify 22 the event in question with one or more announcements 23 that a relatively certain timing in the event 24 announcements do not contain a great deal of value relevant information unrelated to the issue in 25

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1
    question. Such unrelated information is commonly
 2
    called confounding events, for example, a firm might
 3
    announce a change in dividend policy concurrently with
    an earnings release.
 4
 5
                  A study that focuses on earnings release
    will have difficulty separating the earnings effects
6
 7
    from that of the shift in dividend policy. Do you see
8
    that?
9
           Α.
                  Yes.
10
           Q.
                  Do you agree with that text?
11
                   MR. SOMENSATTO: Objection to form.
12
           Α.
                  I have no reason to disagree with this
13
    text.
14
           Q.
                  Do you agree with it though?
15
                   MR. SOMENSATTO: Objection to form.
                   MR. INGOGLIA: You can take a minute to
16
           read it.
17
                  I'm not sure of the context. I have no
18
           Α.
19
    reason not to agree with this.
                  Just to confirm, Dr. Voetmann --
20
           Q.
21
           Α.
                  I agree.
22
           Q.
                  You agree with the condition?
23
                  I agree with this.
           Α.
24
           Q.
                  So just a question -- just a follow up to
25
    what we were talking about a little earlier, Dr.
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Voetmann, is the only way an investor can determine whether or not information is relevant to conduct an after the fact analysis to determine whether there's any statistically significant movement of that company's stock price?

MR. SOMENSATTO: Objection to form.

A. Can you repeat that?

Q. So let me repeat that. Is the only way an investor could determine whether or not information is relevant to his or her investment decision to conduct an after the fact statistical analysis to determine whether or not a release of such information publicly causes a change in the stock price of that company?

MR. SOMENSATTO: Objection to form.

A. So to answer that question let me set it up so in order to understand whether information such as the Capital One transaction data should carry any weight, as a reasonable investor I would and in this case I studied hundreds of observations where I had access to this data and one can then determine by looking at whether or not by running a regression whether or not that information that was not publicly disclosed is related to the price response when the information is disclosed so in that setting which is

1 not an event study as described in this chapter which 2 is different, but here when you are simply looking at doing an analysis of whether that information is 3 relevant, I think you would have to as a reasonable 4 investor to understand how to put weight on that 5 information and as my analysis have shown historically 6 and through the data presented by the SEC, there is no statistically significant relationship between the 8 9 information, the marginal information that defendants had access to and the price responses when the market 10 learned about the actual sales. 11 So I think this is sort of a general 12 0. 13 question. We'll have time to talk about your report 14 later today, we'll get to that soon I'm sure, but 15 let's put aside the specifics of this case. trying to figure out generally how a reasonable 16 investor needs to evaluate whether information is 17 material or not so with that I'd ask the court 18 19 reporter to read back the question and if I can just 20 get your answer to the question as asked. 21 (Record read.) MR. SOMENSATTO: Objection, asked and 22 23 answered. 24 I think it's fair to argue that it's my Α. 25 opinion that one would perform an analysis similar to

1 what I have done in general terms in order to 2 understand whether certain information is value relevant. You would conduct a study where you examine 3 the type of information you're looking at and you're 4 5 examining how the market responds when that sort of information is released to the market. 6 Q. Have you ever set forth this position in 8 any peer reviewed academic journal? 9 Α. Personally? 10 0. Yes, personally? 11 Α. Pretty much in all my academic studies 12 I've set forth this position. 13 Can you please identify to the best of 0. 14 your recollection which publications specifically set 15 forth this proposition?

forth this proposition?

A. Sure, if I have my resume I could tell

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you more specifically, but if you look at my list of publications almost every single one involves some form of event study where we analyze in a number of publications I analyze the price response to announcements of acquisitions and so you're looking at how the market responded to acquisitions in this post setting response to acquisitions. I've also studied earnings announcements and how the market responded to that. I can't recall all my publications as I sit

1 here right now, but the majority of all my 2 publications have in one form or another involved an event study which is following exactly the methodology 3 as described here in this chapter as I explained and 4 5 measuring the return the way you asked the question. MR. KELLY: Could you please mark this as 6 Exhibit 4. 7 (Exhibit 4, Expert Rebuttal Report of 8 9 Torben Voetmann, marked for Identification.) Dr. Voetmann, you have been handed what's 10 Q. been marked as Exhibit 4. Can you please identify 11 this document? 12 13 It's the report I filed in this case. Α. 14 0. So I wanted to help you be able to answer 15 my prior question. This now contains your CV; is that 16 correct? 17 Α. It should. Yes, it does. Dr. Voetmann, could you please identify 18 Q. 19 those publications that set forth the proposition that in order for an investor to determine whether 20 21 information is relevant to a decision to buy or 22 purchase securities that investor would need to 23 conduct an after the fact analysis to determine 24 whether the stock price moved upon the release of that 25 information?

Sure, so I'm looking at page two of my 1 Α. 2 resume and I'm looking at the subtitle research published in academic journals. The first one Returns 3 to Acquirers of Public and Subsidiary Targets, in here 4 we are measuring using an event study how acquirer's 5 6 price changed when they announced an acquisition of public and subsidiary targets. In the second article Skill Differences 8 9 in Corporate Acquisitions, I also did an event study that measures the return when a company announces 10 11 acquisitions. 12 If you skip the next one, the third one 13 is A New Approach to Interpreting Long-Run Returns, Applied to IPO and SEP Stocks, here I did a study also 14 15 an event study measuring how the market responded to learning about IPOs and SEP stocks. 16 17 The fifth article Top Executive Turnover is also an event study approach where we are looking 18 19 at how the market responded to the announcement of CEO 20 either being fired falsely or voluntary. The next one is Demand Curves for 21 22 European Stocks Slopes Down Too is also an event study 23 about changes in the Dow Jones STOXX 50 index and how the market responded to learning about changes in 24

25

composition of an index.

I can keep going. All these are articles that in one form or another is testing whether certain information is connected to a price response.

- Q. I understand that, but I want to make sure I understand your testimony. Are you testifying that each one of these articles set forth the proposition that in order for a typical investor to know whether or not information is relevant to his or her investment decision, that that investor needs to do an after the fact statistical analysis to determine the price reaction of that security when the information is released?
- MR. SOMENSATTO: Objection to form, asked and answered.
 - A. What I'm stating is as my opinion that a reasonable investor would understand by having examined historical events would be able to understand how certain information might influence a price response so all these studies that I just cited are historical -- are studies that a reasonable investor would be able to understand and evaluate when they are look at the total mix of information whether they think they want to buy or sell a security so I believe it's fair for me to argue and say that it is my opinion that a reasonable investor would again when

1 they are contextualizing the information relevant to 2 them in valuing the total mix of information, they understand this type of research, they might 3 understand information beyond this research and 4 evaluate whether they want to buy or sell a security. 5 Did you say in any of these articles that 6 Q. 7 in order for investors to really determine what information is relevant and useful and what 8 9 information isn't that they are required to do a statistical analysis? 10 11 MR. SOMENSATTO: Objection to form, asked 12 and answered. 13 Are you asking in these published papers? Α. Yes, in your published papers? 14 Q. 15 I'm not talking in any of these papers Α. about a reasonable investor decision to buy or sell a 16 17 security. I'm examining information and how the market responds to that information. 18 19 So in any of these papers that you 20 referred to earlier, are you talking about what an investor needs to do to determine whether or not when 21 22 he or she is making decisions, you know, what 23 information they should be relying on and what 24 information they should not be relying on? 25 MR. SOMENSATTO: Objection to form, asked

and answered. 1 2 I'm providing information about how the market responds when certain types of information is 3 disclosed to the market and so a reasonable investor 4 5 may look at these studies when they are evaluating in 6 the future similar type of information being disclosed to the market to understand how the market may respond 8 to that. 9 MR. KELLY: Let's take a brief break. 10 THE VIDEOGRAPHER: We are now off the 11 record at 11:06 a.m., October 16, 2015. 12 (Recess taken.) 13 THE VIDEOGRAPHER: This is tape two of 14 the deposition of Dr. Torben Voetmann. We are 15 now on the record at 11:18 a.m., October 16, 2015. 16 17 Q. Welcome back, Dr. Voetmann. 18 Α. Thank you. 19 So Dr. Voetmann, earlier you were 0. 20 testifying that your test for materiality involves 21 analysis of whether the stock price of a company moves when that information is released to the market; do 22 23 you remember that testimony? 24 MR. SOMENSATTO: Objection to form. You 25 can answer.

A. Yes.

- Q. How would you analyze whether information is material with respect to a privately held company?
- A. Let me see if I understand the question. You're asking me if I learned information about a privately held company, how would I measure the impact on that company?
- Q. Well, no, not how would you measure the impact. If you were to try to analyze whether or not information regarding a company that was privately held so there were not publicly traded securities whose value would react to changes in the market place, how would you go about evaluating whether or not that information regarding the privately held company was material?
- A. So if I was asked to evaluate developments of that information in a privately held company, I would perform a similar analysis. I wouldn't have access to market prices from observable movements, but what I would be able to do depending on the facts and circumstances of your question and the company, but what you could do is you could analyze and value the privately held company and then determine whether that information would change your evaluation of that company.

1 Q. How would you go about doing an 2 evaluation of that company? So if I had access to collected 3 Α. information about the company and I was able to, for 4 5 example, either look at estimating its cash flows and I learned some information about revenues or expenses 6 or some sort of information, I could do an analysis to 8 see how that might effect the cash flows and hence the 9 value of the company. 10 0. So let's just follow up on that. Assume 11 that you got some revenue information about the 12 privately held company. How would you use that 13 information to analyze whether or not it would effect the value of the company? 14 15 MR. SOMENSATTO: Objection to form. 16 Α. I would presumably have built a valuation 17 model for that company and I would be able to determine either through additional information that I 18 19 learned how that would impact my evaluation of that 20 business and that company. 21 So what type of model would you be using; 0. 22 would it be a discounted cash flow type of valuation 23 model or a different type of model? 24 MR. SOMENSATTO: Objection to form. 25 It could be a discounted cash flow model. Α.

It could also be a multiples approach or some other deviation of a discounted cash flow model.

- Q. If you would use a discounted cash flow model, how would you analyze the effect of new revenue information on the evaluation of that company?
- A. So assuming I had a discounted cash flow model built, what I would be able to do is if I change my expectation to forecasted revenues, for example, in your question, I could see whether that additional information on revenue, how that may or may not impact the cash flows and ultimately the discounted value of those cash flows.
- Q. Let's say, for instance, you learned that revenue was going to exceed estimates by 50 percent. How would that information be reflected in your revised discounted cash flow model?

MR. SOMENSATTO: Objection to form.

A. There is a lot of unknown in the question, but if you just isolate and say revenue goes up by 50 percent one year or every year or still within some time period, one would then have to reassess what's the impact on expenses, what's the impact on its capital investments, what's the impact on any factor that influences cash flows and then assess the value of the company to determine whether

or not that increase in revenue ultimately reflected or how much if any it changed the value of the privately held company or private company.

- Q. You had testified earlier about generally that investors would like to have access to all sorts of information in order to determine whether or not that information is relevant to their decision to buy or sell a security. Do you generally recall that testimony?
 - A. Yes.

Q. So can you please describe what analysis a reasonable investor would do with the information that's available to them to determine whether or not what information is relevant and what information is not relevant for their investment decisions?

MR. SOMENSATTO: Objection to form.

A. In my opinion a reasonable investor would examine the total mix of information. It would identify the factors that they deem relevant for making a decision whether to buy or sell a security and how they would evaluate each of those factors may depend on the security they are looking at. For some securities, some information may be more relevant than other securities.

In my opinion, the investor would

1 contextualize the content of each factor and determine 2 what they believe would be relevant in whether or not they would buy or sell that security. 3 0. Are earnings relevant to an investor in 4 5 deciding whether or not to buy a security? 6 Α. Like revenue, earnings is another factor that an investor would examine and determine whether 7 there's any weight on it in order to buy or sell a 8 9 security so yes, I would consider that one of the factors in the total mix of information. 10 11 Let's take a step back. I think there's 0. 12 two questions. There is the bucket of information and there is the question of whether the information about 13 that bucket would be material information. Let's just 14 15 initially focus on the bucket. Earnings information, period, is that something investors look at? 16 17 MR. SOMENSATTO: Objection to form. I think it's fair to say that an investor 18 Α. 19 would consider earnings for any company. Cash flow information, is that something 20 0. investors look at? 21 22 MR. SOMENSATTO: Objection to form. It's another factor that an investor 23 Α. 24 would consider. Revenue information, is that something 25 Q.

1 investors look at? 2 MR. SOMENSATTO: Objection to form. It's also a factor they would consider, 3 but like earnings and cash flows, they would consider 4 5 all these factors. Revenues are a component of earnings, 6 0. 7 correct? I would probably say earnings is a 8 9 component of revenue, but you start at revenue and you work your way down to earnings. 10 11 0. So if you were to write out an equation 12 of what earnings was, revenue would be one of the 13 factors that determines what earnings equals; is that 14 correct? 15 MR. SOMENSATTO: Objection to form. 16 Α. Well, it might be a little simplistic. 17 You could write out an equation and say what's the relationship between earnings and revenue or what's 18 19 the relationship between revenue and earnings so yes, 20 you have to connect the two. 21 0. If you were to try to categorize what 22 goes into earnings, different variables, what would it 23 be, earnings equals what? 24 MR. SOMENSATTO: Objection to form. 25 Α. At a very high level earnings is equal to

1 revenue less expenses at the very basic form, but 2 there's other factors that one would consider such as 3 taxes. So perhaps this is just diction; revenue 4 0. 5 minus expenses equals earnings; is that correct? MR. SOMENSATTO: Objection to form. 6 7 Α. In a very simplistic form, yes. You would not categorize revenue as a 8 0. 9 component of earnings in that regard? MR. SOMENSATTO: Objection to form. 10 11 Α. They all connected so you can write 12 earnings, you know, is expenses plus revenue so plus 13 -- earnings is revenue minus expenses or you could say earnings plus expenses is revenue. You could move 14 15 them around the way you want. It's a very simple simplistic way of looking at it, but they are a 16 17 component of each other. When the CEO wants to know from the CFO 18 0. 19 what the earnings number is, as a mathematical fashion 20 does the company take revenue and subtract expenses? 21 MR. SOMENSATTO: Objection. 22 Q. Or does it calculate it in some other 23 way? 24 MR. SOMENSATTO: Objection to form. 25 If I understood the question if a CFO is Α.

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1
    looking at earnings or the CEO is looking at earnings,
 2
    I believe they would consider looking at the income
    statement and the income statement would be starting
 3
    with revenues and subtracting out various types of
 4
 5
    costs and expenses to get to a level of earnings.
 6
                  If you were to write an equation for cash
           0.
 7
    flow, can you please spell that out for me?
 8
                   MR. SOMENSATTO: Objection to form.
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                  So cash flow starts with earnings and you
    add back non cash items and you also account for after
10
11
    tax financing costs to get to a measure of cash flow.
12
           0.
                  Just so I understand, you subtract after
    tax financing costs?
13
14
           Α.
                 Yes, as well as changes in capital
15
    expenditures.
16
           0.
                  So, Dr. Voetmann, you have taken algebra,
17
    right?
18
           Α.
                  I believe I have, yes.
19
                  So in your equation for cash flow, you
           0.
20
    can easily substitute revenue minus expenses for
21
    earnings; is that right?
22
           Α.
                  Yeah, no, that's mathematically correct.
23
                  So revenues is also a component in cash
           0.
24
    flow; is that correct?
                   MR. SOMENSATTO: Objection to form.
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1 Α. It is also a component to the extent that 2 you choose to measure earnings by simply taking 3 revenue less expenses. Dr. Voetmann, that's how you choose to 4 Q. 5 measure earnings, correct? MR. SOMENSATTO: Objection to form. 6 7 I'm not sure -- I choose to measure cash Α. 8 flows as starting with earnings, but from a conceptual 9 standpoint it really is indifferent whether you start with earnings or some other measure. You are deriving 10 11 the right cash flows, you can derive the correct cash 12 flows the way you're approaching it or the way I'm 13 approaching it. 14 0. Your definition of earnings is revenue 15 minus expenses; is that correct? As I stated at a very high level 16 Α. 17 conceptually that's correct. 18 Q. Dr. Voetmann, you use the term abnormal 19 returns in your report. What are abnormal returns? 20 Α. Abnormal returns is when you measure the 21 price impact, but accounting for any movements in the 22 market or industry. Is the term abnormal returns associated 23 0. 24 with event studies? 25 Α. Yes.

1 Q. Can you calculate abnormal returns 2 without doing an event study? 3 I mean you can measure abnormal returns, but whether or not you are conducting an event study 4 5 might be two different things. 6 Have you ever heard of the term abnormal Q. 7 returns used outside of the event study context? I'm trying to think. The traditional 8 Α. 9 definition of abnormal returns is an event study measure, but I have seen the use of abnormal returns 10 11 that's not necessarily focusing on an event study the 12 way I have done it, for example, in the public papers 13 I've published so I think the answer would be yes, I have seen it outside of event studies. 14 15 Could you please identify what articles 0. or journals have set forth conclusions -- withdrawn. 16 17 Can you identify for me any publications that refer to abnormal returns outside of the context of an event 18 19 study? MR. SOMENSATTO: Objection to form. 20 21 Α. So what I'm recalling right now and I'm 22 not recalling perfectly here as something I can 23 provide, but in the accounting literature there's a 24 number of studies that's done where they are trying to

measure abnormal returns in a setting like earnings

1 response models. There is also a terminology called I refer to as a BBHL model. There's a number of 2 techniques that in the accounting literature where 3 they are using what I consider an abnormal return, but 4 it may not be in the setting of an event study, but 5 6 they are still measuring the return on a company net of market and industry or some sort of accounting for market movements. 8 9 Can you identify the papers you just 0. referred to? 10 11 Α. As I sit here right now I cannot give you 12 the titles of those papers. 13 In those papers did they specifically use 0. 14 the term abnormal returns? 15 Α. Actually if I may refer to my Exhibit 4. 16 0. Feel free to. 17 Α. I think an example might be the article that I cited on my Appendix B, there's an article 18 19 cited by Beaver, Cornell, Landsman and Stubben, The 20 Impact of Analysts Forecast Errors and Forecast Revisions on Stock Prices in the Journal of Business 21 22 Finance and Accounting. I consider that a finance and

accounting paper where they are using I believe the

abnormal term term to analyzing the impact of forecast

errors, but as I sit here right now I can't recall.

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don't believe that they are referring to it as an convenient study, but a study measuring the impacts on forecast errors from analysts so that's an example and there's a number of examples like that where they are using abnormal returns, but it may not be in the classic sense of an event study, but I would have to read the paper again. I don't recall the paper as I sit here right now.

- Q. Just to make sure I understand your testimony, Dr. Voetmann, you're testifying that the Beaver Cornell Landsman article entitled The Impact of Analysts' Forecast Errors and Forecast Revisions on Stock Prices refers to abnormal returns without doing an event study?
 - MR. SOMENSATTO: Objection to form.
- A. What I'm saying is I don't recall the entirety of that article right now, but it's my understanding that they are measuring abnormal returns, but they are not conducting an event study if you are referring to an event study the way you refer to Exhibit 3, chapter 17A so there might be some gray areas of what constitutes an event study, but they are using certainly the terminology of abnormal returns and in fact the paper cited by Graham as well in his report because I'm also citing the Fairfield paper

1 right below the Beaver paper as well as the Asquith 2 paper and the Rees paper, these are all accounting related papers measuring earning surprises and 3 studying those and they are using the phrase abnormal 4 returns in their study as well. Whether that 5 constitutes an event study, I'm not quite sure, but 6 again these are papers that I cite and Graham cited as well that uses abnormal returns. 8 9 Apart from the articles you just 0. referenced, are there any other publications that 10 11 you're aware of that use the term abnormal returns 12 outside of the event study context? As I think I said earlier, there is a 13 Α. 14 number of papers in this field that I'm aware of in 15 the field of accounting where they are using abnormal returns when they are looking at how accounting 16 variables effects or have value relevance. I can't 17 cite all these papers right now, but I believe there's 18 19 a number of papers there that uses the term abnormal 20 return. 21 Can you identify any other examples that 22 you have not already identified? 23 MR. SOMENSATTO: Objection to form, asked 24 and answered. 25 As I sit here right now, I don't think I Α.

can recall any. Event studies is probably the most --1 2 one of the most commonly used techniques financial economists are using when studying how information may 3 impact securities. 4 5 Q. Dr. Voetmann, please turn your attention to Exhibit 4? 6 Α. Yes. Does your report contain a complete 8 0. 9 statement of all opinions you will express and the basis and reasons for them? 10 11 MR. SOMENSATTO: Objection to form. I believe it does. 12 Α. 13 Does your report contain any exhibits 0. 14 that will be used to summarize or support your 15 opinions? 16 Α. Maybe you have to educate me in what context you mean. These exhibits that I've included 17 in my report summarizes my opinion. 18 19 Are there any exhibits that you will use 0. 20 to summarize or support your opinions that are not set 21 forth in your report? MR. SOMENSATTO: Objection to form. 22 23 As I sit here right now, I have not Α. 24 developed or prepared any additional exhibits that may or could be used to summarize my opinion. 25

1 0. Please turn to Appendix A? 2 Α. Sure. Is Appendix A complete and accurate as 3 0. you sit here today? Let me withdraw that first. 4 5 is Appendix A? It's a copy of my resume. 6 Α. 7 0. Is Appendix A complete and accurate as 8 you sit here today? 9 Α. I believe it is. 10 0. Does Appendix A include your qualifications including a list of all publications 11 12 you authored in the previous ten years? I believe it does. 13 Α. 14 0. In any of your publications have you 15 written about revenues? I believe I have. 16 Α. 17 Q. Can you please identify which publications you have written about revenues in? 18 19 Α. Some of these papers go back a while so I 20 have to recall. To the extent it's very possible that 21 in the -- if you look at page 2, the Discussion of the 22 Pre and Post-Tax Discount Rates, we did some examples 23 of simple cash flows that may have referred to 24 revenues, but it may not. I can't recall it right now if revenue was there, but that would be one paper that 25

possibly included revenue discussion, but it was 1 2 focused on cash flows. Another paper or publication I have done is if you look at page 3, Delaware Appraisal 3 Case Reaffirms Valuation Premium for S Corporations, 4 we did some work here and published on how taxation of 5 6 S Corp.'s impacted the value and we built a DCF model for that so that would have likely included revenues 8 as well. It's possible in the Avoiding Pitfalls in 9 the Litigation of Business Valuation this is further 10 11 down on page 3 that we also addressed some concerns about revenues or included discussion of revenues so 12 13 in terms of publications, those are publications that 14 may include revenues, but in addition to that, I have 15 taught grad and undergraduate programs for over ten years and that all addresses revenue at great length. 16 17 Q. In the three publications that you just referenced, do you recall what specifically you wrote 18 19 about revenue? 20 Α. I don't recall that right now. It was 21 not the focus of the publications. 22 Q. In your academic work, what do you recall 23 saying about revenue to your classes? 24 MR. SOMENSATTO: Objection to form. That's a very broad question. 25 Α.

1 know if you want to narrow it or I can explain. 2 Let me start this way. When you first --3 in which classes would you talk about revenue? If you look at page 1, these are MBA and 4 Α. grad classes that I'm teaching currently. In each of 5 those three; managerial finance, capital market and 6 investment banking and corporate finance, all three go 8 at great length into examining revenues, valuing revenues, building DCFs, multiples that all derives 9 from including revenues. If you go to page 2, I 10 11 taught a number of years at The Wharton School in 12 corporate finance and corporate valuation. All these courses there as well involve extensive discussion of 13 revenues and valuation concepts and in addition to 14 15 that I taught some executive programs at New York Institute of Finance and Financial Modeling World. 16 17 Both places was programs to executives about how to build valuation models and again extensive discussion 18 19 about revenues. What role do revenues play in evaluation 20 Q. 21 models? 22 MR. SOMENSATTO: Objection to form. 23 Again, it's a broad question what role. Α. 24 Are you thinking about a DCF, for example? 25 When you teach your students how to do an Q.

valuation model of a company, what type of model do you refer to typically?

- A. So the first part of these programs is really for educating the students and teaching students about how you evaluate an income statement and a large part of that is to understand all the different line items of an income statement which typically starts with revenue and you work your way down through expenses to earnings.
- Q. In terms of your teaching experience, are there any items listed on Appendix A in which you do not discuss revenue?
- A. There is only one which actually partially might touch on revenues as well. I did an independent study which was an independent study done by a graduate student at Wharton on valuation of football teams in the U.S. so it's been a while, a long time ago. I suspect it did cover of course how they would generate revenue, but it was an independent study so it was not a course where I taught the student. He had already taken the valuation course that I taught so that was an independent study, but that -- and the last one actually at Copenhagen Business School I taught a seminar on finance which was more about various topics of finance not specific

1 to revenue so those are the only two I can think of. 2 My core background is in corporate finance and valuation. My graduate work is in that 3 field and that naturally leads to a discussion of 4 5 among other things revenue. Does Appendix A contain a list of all 6 0. 7 other cases in which during the previous four years 8 you testified as an expert at trial or by deposition? 9 Α. Yes, page 8. That first item United States of America 10 0. versus Wells Fargo Bank, N.A., can you please describe 11 12 the opinion offered in that case? 13 MR. SOMENSATTO: Objection to form. It's an on-going case so I'm not sure 14 Α. 15 what my role is if I'm allowed to talk about the specifics of the case. In general terms it was not 16 addressing revenues. 17 Is there a confidentiality order with 18 0. 19 respect to your opinion in that case? 20 Α. That's why I'm hesitant because I believe 21 there was. 22 0. Obviously until we get certainty on that 23 I will not press further, but I think maybe there is a 24 way to get clarity during a break. Were you 25 representing the United States of America or Wells

1 Fargo or one of the other defendants? 2 Α. Representing the United States of 3 America. Was that the Department of Justice that 4 0. 5 you were representing? 6 Α. Yes. Is that a civil or criminal case? 7 0. probably a civil case? 8 9 Α. Civil case. There is no court. What United States 10 0. 11 Attorney's Office was it? 12 Α. Right here in the Southern District. 13 Can you please describe the opinion you 0. 14 offered in the Long v Morgan Stanley Trust case? 15 Α. Sure. This was a case where I represented the Long family. This was a case involving a trust 16 17 that the Long family had established which included securities of Manulife, a Canadian company and I think 18 19 John Hancock and my role was to re-evaluate the value of the trust because there was an issue with whether 20 or not these securities specifically the Manulife 21 22 securities why they had suddenly disappeared from the 23 account statements that the Long family was receiving 24 so that was a dispute about the value of those 25 specific securities.

Were the securities publicly traded? 1 Q. 2 Α. Yes and that's the exact dispute. 3 an insurance company and in 2000 they went from a policyholder company to a public trading company so it 4 5 was in that transition there was a -- for some reason the transition where you now had securities, those 6 securities were not transmitted to the account statements and so the Long family didn't -- had to 8 re-evaluate what was the value of the account or the 9 trust if we in fact had included those securities as 10 11 they went through from a policy company to a publicly 12 traded company. 13 In analyzing the value of the securities, 0. 14 did you use revenue information at all? 15 Α. No. 16 0. The next matter, the Matter of the 17 Arbitration of Tom Patterson v GEICO, could you describe the opinion you offered in that matter? 18 19 Sure. This is a valuation of a tech Α. 20 company founded and started by Tom Patterson and I was 21 asked to do a valuation of that tech company. 22 Q. In doing that evaluation, did you use revenue information? 23 24 I considered revenue, the stock revenues Α. 25 as well as other metrics for valuation.

1	Q. Did you use a discounted cash flow model
2	or some other model?
3	A. Some other model.
4	Q. What type of model?
5	A. It was a more multiples approach as a
6	tech company start up.
7	Q. In the Charles P. Haggarty and Gina M.
8	Haggarty v Wells Fargo Bank matter, could you please
9	describe the opinion you offered in that matter?
10	A. Sure. I offered an opinion on cost of
11	funds. It was a short opinion on just how to read and
12	understanding the terminology of cost of funds.
13	Q. When you say cost of funds, could you
14	please define that?
15	A. Cost of funds related to mortgage backed
16	securities.
17	Q. Could you provide a little more
18	information; is cost of funds a cost to borrow funds
19	or is it some other cost?
20	A. It's the cost of borrowing funds so there
21	were some indices that measures the cost of borrowing
22	funds so it was just a short declaration on providing
23	some data on those indices on cost of funds.
24	Q. Could you please describe the opinion
25	offered in the Munos v China Expert Technology case?

1 Α. Sure, so here I represented the China 2 Expert Technology and it was a securities class 3 action. I was engaged to respond to a class certification report. 4 Was the issue that was the subject of 5 0. 6 your opinion whether or not the class should be certified in that case? To some extent, yes. My assignment was Α. 9 to determine whether there was sufficient evidence to suggest that the China Expert Technology company 10 whether its security was trading in an efficient 11 market so in that case I testified about event 12 studies. 13 I can assume, but did your opinion in 14 0. 15 that case support the fact that the securities were trading in an efficient market or refute that? 16 17 Α. I didn't come up with an affirmative opinion. I was responding to another expert's report 18 19 suggesting that it was trading in an efficient market. Dr. Voetmann, please describe your 20 0. 21 experience in insider trading cases? 22 Α. This is my first experience as an expert 23 witness filing a report as an expert witness in an 24 insider trading case. During my about 15 years in 25 litigation consulting, I have consulted on a number of

1 insider trading cases or assisted colleagues of mine 2 working on insider trading cases. Can you please identify the cases that 3 you are able to identify in which you have either 4 5 testified in your consulting experience in insider trading cases? 6 So I don't have any testifying Α. 8 experience. There is nothing to identify there. The 9 only one that comes to mind, I'm not sure I can identify. I guess I can find out at a break. 10 11 It's fair, but apart from that one that 0. 12 you have questions about, there are no other cases in which you consulted on insider trading cases? 13 14 Α. No other specific case comes to mind 15 where I can identify. MR. KELLY: This is 5. 16 17 (Exhibit 5, Document, marked for Identification.) 18 19 Dr. Voetmann, you have been handed what's Ο. been marked as Exhibit 5. Could you please identify 20 this document? 21 22 Α. It appears to be the bio that's on The 23 Brattle Group's website of me. 24 Dr. Voetmann, why is the bio on The 0. 25 Brattle Group's website different than what's set

forth in your Exhibit A?

- A. Exhibit A is my resume and this is just a bio summarizing my resume.
- Q. You see, Dr. Voetmann, there is a section on your bio labeled information materiality on the bottom of the first page and top of the second page, do you see that?
- A. Yes.

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- Q. You see your bio states event studies are commonly used to evaluate the materiality of non public information once it's disseminated into the market. You see that?
- 13 A. Yes.
- Q. Do you agree with that statement?
- 15 A. I wrote the statement so yes.
- Q. Dr. Voetmann, did you use event studies in your report?
- A. In this report I'm using a form of event study in that I'm measuring abnormal returns and I'm doing a cross section regression across events to
- 21 identify whether the information in each of those
- 22 events whether you can conclude that the marginal
- 23 information from the Capital One transaction data and
- 24 the price impact would lead you to conclude there's a
- 25 significant relationship and based on my analysis

there is no statistically significant relationship between the information that the defendant had access to.

Q. Sorry, I'm a little confused. I thought you had and this will speak for itself, I'm not trying to say what you testified to. I thought earlier you had testified that you did not do an event study in connection with the case so I'm just trying to do a couple follow up questions to get an answer and try and get some clarity here.

If you were to write about the analysis that you did in this matter in a peer reviewed academic journal, would you describe it as an event study?

A. I would and I don't think I testified prior otherwise I misstated it that I didn't do an event study. I said I didn't do a traditional event study in the form that was explained in my published articles. It's an event study to the extent that we are trying to measure insider information and trying to observe whether or not when that information is revealed to the market whether or not that leads to a significant price change so in that setting I think that still constitutes -- people would argue that that still constitutes a form of an event study.

Who decides whether or not a study is an 1 0. 2 event study or not? MR. SOMENSATTO: Objection to form. 3 I don't know if there is a body that 4 Α. 5 decides, but certainly when as an academic you are 6 publishing articles, it goes through a very rigorous peer review process. The type of analysis that you performed 8 9 in this case, are there any publications or articles that you can point to in which you ran this analysis 10 11 and you described it as an event study? 12 Α. The publications that come close to what 13 I have done and are similar to what I have done among 14 others the Beaver article that I mentioned on my 15 Appendix B plus the articles that Mr. Graham cited in his report as well. All these articles that -- going 16 17 to Appendix B, all these articles that I cite from the Cornell Bradford Landsman paper to the Asquith paper, 18 19 the Rees paper or the Beaver paper, the Fairfield 20 paper, all these papers the ones including the ones 21 that Graham cites are all using a framework similar to 22 what I have done and not a framework or the framework 23 that Mr. Graham put forward. 24 0. I think you misunderstood my question. 25 Dr. Voetmann, I was asking in terms of your

publications whether you used the methodology set 1 2 forth in your report and you described it as an event 3 study, has that happened? Α. I have not published -- so the analysis 4 in this report is looking at revenue surprises and 5 6 study revenue surprises and if you had access to revenue information would a revenue surprise cause a price change and so if you had access to information 8 9 as an investor, would you consider that relevant information. The publications I have done are similar 10 11 in tenor, but they are not studies of revenue 12 surprises. I have studied earning surprises and I have studied disclosure of other relevant information 13 14 to the market such as acquisitions. 15 Let's put aside specifically the 0. 16 variables you're studying because that's the beauty 17 about regression and statistics, right, you could pick whatever variables you want to determine the 18 19 relationship with and run those tests, but so let's 20 just put that aside for a second. 21 In terms of the actual analysis that you 22 ran, has that been described as an event study in any 23 of your publications? 24 MR. SOMENSATTO: Objection to form, asked and answered. 25

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- Α. I believe you can arque it has because the framework in which I'm operating is a reliable methodology that follows the standards that -- the papers I just cited put forward. Which articles describe the analysis as Q. set forth in your report as an event study? MR. SOMENSATTO: Objection to form. So again, I think we have to be careful Α. about defining what an event study is. There are many different types of event studies. An event study to me is a study of looking at specific information and trying to determine whether that information is relevant to an investor by whether or not they would if they had this information would make the investment decision and so what an event study can do is it can see whether when the market learns about certain pieces of information whether the price responds to it and so what I have set forth here in my report is an
 - There's a big difference between doing an ex-post study versus an ex-anti study and what we are looking at here what is the ex-anti information about revenue surprises, in other words, if I had access to the transaction data prior to the announcement would I believe I could use that to make an investment

analogy to that. You are looking at revenue surprises.

decision and when I look at what actually happened in the market, how the market actually responds to it similar to when you do an event study, there is no statistically significant relationship between the price response, price impact and the transaction data.

- Q. Dr. Voetmann, I think you lost track of the question. It's a pretty simple one and I'll modify it slightly to try to take some ambiguity away. What articles or publications have you used the methodology as set forth in your report in this case and you used the term "event study" to describe that methodology?
 - MR. SOMENSATTO: Objection to form, asked and answered.
- A. I might repeat myself, but the articles that I cited as well as the articles cited by Graham, all articles that are looking at surprises and connecting revenue or earning surprises to price responses so each of those articles are in effect doing a similar study. The difference is each of these articles similar to me and my study is focusing on does this information tell something about how the market responds where Graham is not connecting those dots, he's not connecting the information to a price response, he's connecting the surprises to the actual

1 earnings which is a very different regression and a 2 very different study and not what you see in these 3 articles that I just cited. MR. KELLY: Can you please read back the 4 question. Please tries to listen to the 5 question. 6 7 (Record read.) Please describe the articles and 8 0. 9 methodologies that you have written that used the methodology that you use in your report and describe 10 11 that methodology as an "event study"? 12 Α. Could you read it back? 13 (Record read.) I don't think that's what I asked. 14 0. 15 Dr. Voetmann, please identify the articles or publications in which you've used the methodology set 16 17 forth in your report in this case and you describe that methodology as a "event study"? 18 19 So make sure I get the question right, 20 you are asking what articles I have published where I 21 have used this methodology or a similar methodology? 22 Q. I'm asking about the articles that you've 23 published? 24 Α. That I've personally published so if I 25 look at my resume, Appendix A, page 2 so you need to

1 break down my analysis in this report. My analysis in 2 this report is based on the abnormal returns and surprises in this case because we are addressing 3 revenues so revenue surprises. Except for one of the 4 articles that I published in peer review journals, I'm 5 6 also using abnormal returns. Except for two. using abnormal returns as well and moreover in an 8 unpublished working paper I examined earnings 9 announcements so to that extent I'm looking at earning 10 surprises, granted it's not revenue surprises, but 11 earnings announcements so the study I put forward in 12 my report is looking at what is the relationship 13 between abnormal returns as I've used extensively in 14 my published articles relative to surprises around 15 earnings announcements and I've studied prior earnings 16 announcements before. 17 Again, just looking at what I've published, but besides what I've published, I have 18 19 done many cases over the last 15 years as a consultant 20 involving research around surprises particularly 21 earning surprises. 22 Q. Let's go back to Exhibit 5. You see the 23 section on the second page entitled insider trading? 24 I do. Α. You write that insider trading cases 25 Q.

1 remain a significant concern for public companies as 2 well as their executives, board members and other insiders, do you see that? 3 Α. Yes. 4 5 0. Do you agree with that statement? Α. 6 Yes. 7 0. Do you think that -- withdrawn. Why are 8 insider trading cases a significant concern for public 9 companies? 10 Α. I think anyone who runs a public company would be concerned about employees that are using 11 12 inside information to trade and so I think just as a 13 general matter it's a concern if you engage in insider 14 trading. 15 Do you see in the next sentence it says 16 that as part of your cases you've analyzed patterns of trading behavior? 17 18 Α. Yes. 19 Just generally how would the pattern of Ο. trading behavior be indicative or not indicative of 20 insider trading? 21 22 MR. SOMENSATTO: Objection to form. 23 Α. So here I'm referring to a consulting --24 an undisclosed consulting case, multiple cases actually, where I've been engaged by a board to 25

analyze -- it's a publicly traded company and its board asked me to analyze its company stock for trading behaviors around certain pieces of information so here's an example where the board was concerned about potentially that inside information might have leaked to the market and they wanted to see whether that information was observable in the market through the behavior of the trading that occurred.

Q. Could you just describe a little more in detail so to the extent that the information was shared with the market, would you expect there to be trading around the dissemination of that information or a change in trading -- withdrawn.

Let's take a step back and talk about just generally right now what type of pattern would you expect to see when material non public information is shared with someone?

MR. SOMENSATTO: Objection to form.

A. So it depends on what information has been disclosed, non public information so in this specific instance here the information the board believed was material was highly relevant such that one might consider that information to be important enough that you might make purchase and sales decisions around it so in that instance my analysis

1 was to see if we observe trading volume and price 2 changes around the potential release of that information. We didn't find any, but that's what we 3 looked at. 4 Just to follow up on that. To the extent 5 0. 6 you know information you shared from one person to another and -- withdrawn. Let's say that you know information was 8 9 obtained by one individual and shortly after obtaining that information they trade on it. Is that more 10 indicative of insider trading or less indicative of 11 insider trading? 12 13 MR. SOMENSATTO: Objection to form. 14 Α. I think you still have to do an analysis 15 to determine -- the first step is to determine whether in fact they traded -- step back. First you have to 16 17 evaluate whether the information that they obtained was in fact relevant information that would lead one 18 19 to consider that they would change the price of a 20 security. 21 Second, one would have to evaluate 22 whether that individual looked at a host of other 23 factors to rule out whether they traded on that specific information or traded on some other type of 24 25 information before one can ascertain whether they are

actually trading on what is in fact insider trading based on the non public information.

- Q. Is someone trading on information -withdrawn. Let's do the reverse of that. Let's just
 say someone gains access to information and that
 person doesn't trade on it. Is that proof that the
 information was not material non public information?

 MR. SOMENSATTO: Objection to form.
- A. No, I don't think that's sufficient information to make that conclusion.
 - Q. Why is that?

- A. One would have to study and examine whether or not an individual trades on it one would still have to examine and study whether the information was material. Just because you trade on it or didn't trade on it is not sufficient to say that it's material.
- Q. Just to follow up then you would submit that there needs to be a study as to whether or not the disclosure of that information would impact the price of the stock; is that fair to say?
- A. Yeah, I would conduct a study to see whether that information would be relevant or an investor would put enough weight on it to make his or her decision to buy a security and we observe a price

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    change.
                Could you please turn to Appendix B of
 2
           Q.
 3
    your report?
 4
                   MR. SOMENSATTO: Are we at a good place
           for a break?
 5
                   MR. KELLY: We can take a short break. I
 6
 7
           have got a lot to go so let's take a short
           break now.
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                   THE VIDEOGRAPHER: We are now off the
10
           record at 12:20 p.m., October 16, 2015.
11
                   (Luncheon recess taken at 12:20 p.m.)
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AFTERNOON SESSION 1 2 (Time Noted: 1:00 p.m.) 3 TORBEN VOETMANN, resumed and testified 4 5 as follows: 6 7 CONTINUED EXAMINATION 8 BY MR KELLY: 9 THE VIDEOGRAPHER: This is tape three of 10 the deposition of Dr. Torben Voetmann. We are 11 now on the record at 1:02 p.m., October 16, 12 2015. 13 Welcome back, Dr. Voetmann. 0. 14 Α. Thank you. 15 Could you please turn to Appendix B of Q. 16 your report. Dr. Voetmann, is Appendix B complete and 17 accurate as you sit here today? I believe so based on the materials I've 18 Α. 19 been provided. 20 0. This lists the documents you relied upon 21 in forming your opinion. Were there any documents 22 that you considered in forming your opinion that are 23 not listed in Appendix B? 24 Α. That's possible that the produced documents in the middle of the page, there was a lot 25

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    of materials in those files and some of them were not
 2
    necessarily cited in my report or relied on to
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    generate the Capital One data. I can't recall right
    now every single document in that production, but
 4
 5
    there's a number of documents in that production.
 6
                 That's fair. I think my question is
           Q.
 7
    somewhat different though. Are there any materials or
8
    documents that you considered that are not listed on a
9
    Appendix B?
                 No, I don't believe so.
10
           Α.
11
                  MR. KELLY: Exhibit 6.
12
                   (Exhibit 6, Complaint, marked for
           Identification.)
13
                 Dr. Voetmann, you have been handed what's
14
           0.
    been marked as Exhibit 6. Could you please identify
15
    this document?
16
17
           Α.
                 It's the Complaint for the case that I've
    been provided. It's at least the document seems to be
18
19
    the same as what I was provided.
                 Can you please summarize the Commission's
20
           0.
21
    allegations in this action?
22
                  MR. SOMENSATTO: Objection to form.
23
                 At a high level the allegation as I
           Α.
    understand it is the defendants Bon Huang and Nan
24
25
    Huang committed insider trading by relying on
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1 proprietary information from Capital One credit cards transactions data for a number of companies and I 2 believe at a high level the allegation is that they 3 considered that information and made a number of 4 5 transactions or purchases and buy and sell transactions in a number of publicly traded companies. 6 0. Do you know approximately how many 8 transactions they engaged in that are alleged to be 9 considered insider trading? MR. SOMENSATTO: Objection to form. 10 11 Α. So I recall in the Cain and Graham report 12 they talk about a number of transactions and maybe in here as well, but they traded a number of times in 13 approximately a couple of hundred publicly traded 14 15 companies. 16 0. Dr. Voetmann, is there any particular 17 portion of the Complaint that you relied upon in forming your opinions? 18 19 MR. SOMENSATTO: Objection to form. Well, I relied on the entire 20 Α. 21 Complaint, but what it really provided me for my 22 opinion which as described in paragraph one of my 23 report was to rebut and critique Mr. Graham's analysis 24 and Dr. Cain I used the Complaint to get an 25 understanding of the allegation and also get a little

background on the case.

- Q. You can put that exhibit to the side.

 Dr. Voetmann, could you please identify all

 communications you have had with defense counsel that
 relate to compensation for your study or testimony?
- A. I've had a handful, maybe a couple of conversations. Initially when we get hired I explain how The Brattle Group is compensated for my work and we also had of course -- that may be the extent of it. Might have been another exchange or two, but it was just about that initial contact we had.
- Q. Was there any negotiation over the price of your engagement in this matter?
- A. There was negotiation in terms of just understanding the amount of work that's involved in conducting a study in the limited time frame we had available understanding the amount of time it takes to conduct such study.
- Q. Any negotiation of The Brattle Group's typical rates?
 - A. No, we offered the same rate as we do any other client on the hourly rate.
 - Q. Can you please identify all communications you've had with defense counsel that identify facts or data that defense counsel provided

1 and that you considered in forming any opinions 2 expressed? It's very limited. Counsel provided to 3 Α. me if you look at the first page of Appendix B counsel 4 5 provided me with the produced documents or a zip file whatever format it's coming in of the Cain and Graham 6 7 production so that was the exchange we had of data. 8 In addition to that, counsel provided me with the legal pleadings as well as the expert report. Other 9 than that, that's pretty much the extent of what they 10 provided and pretty much the extent of our discussion. 11 12 They just provided it to us and we did our analysis. 13 Could you please identify assumptions 0. 14 that defense counsel provided and that you relied on 15 in forming your opinions? 16 Α. They didn't provide any assumptions. 17 Q. Turn to paragraph 6 of your report, please. I see The Brattle Group is being compensated 18 19 for your work at an hourly rate of \$550 an hour; is 20 that correct?

A. That's my hourly rate, yes.

- Q. As of today, approximately how many hours have you billed to this matter?
- A. I don't recall how many hours I billed as of today. I spent some time over the last couple of

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weeks on this case, but this has been a very short
1
    time frame.
 2
                 Did you spend more than ten hours working
 3
           0.
    on this case?
 4
 5
                  I did.
           Α.
                 Did you spend more than 25 hours working
 6
           0.
 7
    on this case?
 8
                  I did. I probably did over a couple of
           Α.
9
    weeks, yeah, more than 25.
10
           Q.
                 Have you spent more than 50 hours working
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    on this case?
12
           Α.
                  That's probably the amount of time I
13
    spent, but I would have to check. That's not
14
    unreasonable to believe it's in that -- approximately
15
    that neighborhood.
16
                   MR. KELLY: Could you mark that Exhibit 7
           and 8.
17
                   (Exhibit 7, Expert Report of Stephen
18
19
           Graham, marked for Identification.)
20
                   (Exhibit 8, Expert Report of Matthew
           Cain, marked for Identification.)
21
22
           Q.
                 Dr. Voetmann, you have been handed what's
23
    been marked as Exhibits 7 and 8. Can you please
24
    identify those documents?
                  So Exhibit 7 is a report by Steven Graham
25
           Α.
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1 and Exhibit 8 is the report by Dr. Cain. 2 0. Approximately how much time did you spend 3 reviewing Mr. Graham's expert report? Α. I can't recall a specific -- I didn't 4 count how many hours I spent reading these two 5 I received those two documents, I reviewed 6 documents. 7 them and I probably reviewed them a few times, a 8 number of times subsequent to first receiving them. 9 Prior to issuing your report, did you 0. 10 review Mr. Graham's expert report for more than an 11 hour? 12 Α. For sure, yes. More than five hours? 13 0. Yes. Like last night I reviewed it 14 Α. 15 again, I read it again. Let's focus first on the amount of time 16 0. 17 you spent reviewing Mr. Graham's report prior to issuing your expert report. Let's start here. Prior 18 19 to issuing your report, did you review Mr. Graham's 20 expert report? 21 Α. Yes. 22 Q. Approximately how much time did you spend 23 reviewing Mr. Graham's expert report prior to issuing 24 your report? 25 A few hours. Α.

1 Did you review Dr. Cain's expert report Q. 2 prior to issuing your report? Α. 3 Yes. Approximately how much time did you spend 4 0. 5 reviewing Dr. Cain's report before issuing your 6 report? Less time. A couple of hours. Α. 8 hours. How much time did you spend doing any 9 0. econometric analysis on this matter? 10 11 I spent some time doing that. I Α. 12 formulated the analysis and I also had assistance from 13 staff at The Brattle Group to help execute some of those analyses. 14 15 0. Approximately how much time did you personally spend doing analysis on this matter? 16 17 Α. Define analysis for me if you wouldn't mind? 18 19 Let's first start by asking whether you Ο. 20 yourself crunched any numbers in connection with any 21 of the analyses set forth in the report? 22 Α. I did. 23 Approximately how much time did you 0. 24 crunch those numbers? 25 Five or ten hours maybe. Α.

Let's put aside the specific time that 1 0. 2 you spent personally crunching numbers. Approximately how much time did you oversee others who did the 3 analysis on your behalf? 4 I worked closely with the team for a 5 Α. number of hours or the two weeks in which we had 6 7 access to the data and I finished the report so 8 throughout that period we worked pretty much 9 throughout that whole period just on this case. 10 Q. To try to understand your testimony, when did you first -- when did The Brattle Group first get 11 12 engaged by defense counsel? I can't recall the exact date. 13 14 shortly after if not on September 18th, right around 15 the time of the issuance of the report by Mr. Graham and Dr. Cain. 16 17 Q. Did you and your team work full-time on this matter between the time you received the reports 18 19 from Mr. Graham and Dr. Cain and the time that you 20 issued your own report? 21 Α. No. 22 MR. SOMENSATTO: Objection to form. 23 No. Α. 24 That's fair. I thought you said you did 0. so let's do it a different way. Just going back to 25

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    what I asked before, apart from your crunching the
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    numbers, approximately how much time did you spend
    overseeing others who worked on the analysis as set
 3
    forth in your report?
 4
                  I think it took if I recall correctly
 5
           Α.
 6
    took about a week or a number of days before we
 7
    actually received the production so that we could
 8
    start crunching the numbers to use your phrase and
9
    that left us with about two weeks to crunch the
    numbers and for me to draft the report and final
10
11
    report. During that two week report I was engaging
12
    with my team every day on this case.
13
                 How much time did you spend personally
           0.
14
    drafting the report?
15
           Α.
                 Well, I don't know the exact number of
16
    hours, but I drafted the majority of the report.
17
           Q.
                  Was it more than two hours drafting the
18
    report?
19
           Α.
                  Yes.
20
           Q.
                 More than ten hours drafting the report?
21
                  It was probably ten hours in that range
           Α.
22
    at least.
23
                 Who else from The Brattle Group worked on
           0.
24
    this matter?
25
                  I had three people assisting me.
           Α.
                                                     The
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1 first one is Pavita Kumar. The second one is 2 Catherine Marcello and Kirby, I'm blanking on her last name, something like Leshore, but I would have to go 3 back and confirm the last name. She just started with 4 5 us. Approximately how much have they billed 6 0. 7 to this matter? There has been about two hours Catherine Α. 8 9 and Kirby almost full-time on this matter. 10 MR. KELLY: Can you read back his answer. 11 Α. I meant two weeks. Catherine and Kirby 12 spent about two weeks. When we received the data after 13 about a week having been engaged, then they spent 14 about two weeks first crunching all the numbers and 15 getting the numbers lined up and processed from the 16 files that we received and that's where they spent most of their time. 17 Approximately how much time did Pavita 18 Q. 19 Kumar spend? 20 Α. Probably half. 21 Approximately one week then? 0. 22 Α. Approximately one week, yes, stretched 23 out over two weeks. 24 0. What are the billing rates for each of 25 these individuals?

Α. I don't recall. I can give 1 2 approximations if that's helpful. To the best of your recollection? 3 0. Pavita is probably around 400 and 4 Α. 5 Catherine is probably around 350 and Kirby is probably around 250. 6 Is any portion of your compensation from 0. 8 The Brattle Group influenced by the firm's revenue on 9 the matters that you work on? 10 Α. Sorry, could you repeat that. 11 MR. KELLY: Could you read that back. 12 (Record read.) 13 I'm not sure I fully understand the Α. Brattle's revenue comes from all the 14 15 matters we work on and I get paid by The Brattle 16 Group. I'm not paid based on compensation 17 specifically to this matter. I understand that. I'm wondering if your 18 0. 19 yearly compensation, if there is a component that is a function whether mandatory or discretionary that 20 21 factors in the amount of money that the firm takes in 22 on the matters that you work on? 23 Can I say it back to you to make sure I Α. 24 understand it? 25 Certainly. Q.

Are you asking if my discretionary bonus 1 Α. 2 is a function of the specific cases I work on? 3 That could be -- that is one possible way 0. 4 of interpreting it I suppose. Let's do it this way. 5 You have a flat salary and a discretionary bonus? That's my two components. 6 Α. 7 0. The only two components? 8 Α. Yes. 9 So presumably the flat salary is not 0. 10 effected by the matters you work on, correct? 11 Α. Correct. 12 0. Is the discretionary bonus at all 13 influenced by the amount of revenue that the firm 14 takes in based on the matters that you worked on? 15 Α. I would like to know how they calculate 16 my discretionary bonus. It's not a formulaic process 17 in which they determine the discretionary bonus. There's a number of factors that goes in; both case 18 19 work, non billable work, your contribution to the firm 20 besides working on actual cases so I'm not -- I have 21 never seen or taken part in how they actually 22 determine that discretionary bonus so I don't know if 23 I can answer that -- honestly I don't know if I could 24 answer it precisely that that's what they do. 25 Q. Could you please look at paragraph 7A of

1 your report? 2 Α. Okay. You state in the first sentence of 3 0. paragraph 7A Mr. Graham's analysis rests on the 4 5 assumption that only revenue data is material to a 6 reasonable investor. Can you please identify where in Mr. Graham's report he makes this assumption? So sure, my read of Graham's analysis is 8 9 that the only factor that he considers when he's attempting to establish whether the Capital One 10 11 transaction data is relevant to an investor is by 12 looking at revenue. Throughout the entire report I 13 have not seen any evidence that Mr. Graham had 14 examined any other factor that an investor might 15 consider the total mix of information that might be

- Q. Does he say that in the report?

 MR. SOMENSATTO: Objection to form.
- A. He doesn't directly state in his report. He doesn't directly state that it's the only, but he does state in paragraph 3 that he's been asked to evaluate whether a reasonable investor would consider

relevant so by implication Mr. Graham is asserting

that revenue is the only important factor for him to

establish whether that information is material to a

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reasonable investor.

1 this information, this information being revenue to be 2 important when making a decision to buy or sell in 3 those companies. Mr. Graham doesn't state, however, that 4 Q. he was asked to evaluate whether a reasonable investor 5 6 would only consider this information to be important, correct? He has in this paragraph 3, no, he does 8 9 not state it's the only information, but as I reviewed his report, it is the only information that he 10 11 considers. 12 0. Let's take a step back here for a second. 13 You're saying -- withdrawn. You're testifying that because the only information that Mr. Graham focused 14 15 on was revenue, that that necessarily means that he's 16 assuming that investors only care about revenue? 17 Α. Could you read that back? (Record read.) 18 19 That's not -- I'm not sure that's what Α. 20 I'm testifying to. What I'm saying is the premise for 21 his entire analysis is based on the assumption that he 22 can examine only revenue data to determine whether that's material for a reasonable investor. 23 24 0. Does any portion of Mr. Graham's analysis

assume as a mathematical matter or economic matter

that revenue is the only factor that's relevant to an investor's decision to buy or sell a security? MR. SOMENSATTO: Objection to form. Α. So Mr. Graham did at least two analyses. He did three, but two that focus on revenue where he focused on a correlation analysis and the second one is regression analysis. In both these analyses, Mr. Graham is looking at revenue as the only factor to consider when asserting or determining whether the information about transaction data from Capital One would be material to an investor. 0. Does Mr. Graham ever say that earnings information is irrelevant to investors? Α. He doesn't state -- you said earnings? He cites a survey where he states that among the survey of 401 financial advisors I think in the Graham paper that earnings is the number one thing that they In addition, they focus on revenue and cash focus on. flows and other cash flow measures so he's aware of

other factors, but he didn't include any of them in 20

his analysis for determining whether the transaction

data was material.

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Mr. Graham does expressly acknowledge 0. that earnings is another piece of information that investors care about, correct?

He acknowledges that there are other 1 Α. 2 factors including earnings that an investor may 3 consider in the total mix of information. Does Mr. Graham ever say that cash flow 4 0. 5 is irrelevant to investors? 6 He acknowledged that cash flow may be Α. 7 relevant to investors, but again, as I was asked to examine his analysis, he did not include any of these 8 9 factors in his analysis. 10 Q. Did you include earnings in your 11 analysis? 12 Α. To some extent I did, yes. 13 What extent is that? 0. 14 Α. Because the main difference and a key 15 difference between my analysis and Graham's analysis is I'm looking at how the market responds to the 16 information about revenue and embedded in the stock 17 18 price and the stock price response is a measure of 19 composite of all these other factors including 20 earnings. 21 So are you testifying that the -- I'm a 0. 22 little confused by what you're saying. How many other 23 -- let me ask you this. Same question with respect to 24 cash flow. Do you include cash flow information in 25 your analyses?

A. The answer is the same, yes.

- Q. So how many other factors are there that are being reflected in the abnormal returns as set forth in your report?
- A. So the abnormal return is a measure of what an investor would consider relevant information after making their buy and sell decisions so it reflects how investors are evaluating the total mix of information and thereby all the factors that they could consider so it's embedded into the price of the company hence the abnormal return.
- Q. Can you enumerate all the factors that are influencing the abnormal price figures in your analyses? Let me revise that.
- Dr. Voetmann, could you identify all of the factors that are influencing the abnormal returns as set forth in your analyses?
- A. I can't sit here -- as I sit here right now and list all the factors that an investor may have considered. All the factors depends on the company, the industry, the time period. There is a lot of elements that he goes into identifying at a given point in time what information is relevant as you are making a decision to buy or sell a security.
 - Q. I think you misunderstood my question. I

was focusing on not what information is relevant to 1 2 an investor, but what information is reflected in the abnormal returns as set forth in your analyses. 3 MR. SOMENSATTO: Objection to form. 4 MR. KELLY: That wasn't a question. 5 Can you read back the question I asked? 6 7 MR. SOMENSATTO: I'll object to that statement so go ahead. 8 9 MR. KELLY: I'm not sure you can object 10 to a statement. It's just to try to clarify, 11 but can you re-ask the question that I asked 12 before. 13 (Record read.) 14 Α. As I sit here right now, I've not taken 15 that exercise of determining all the factors that may influence the abnormal return. 16 17 0. Just as a corollary to that then, you have no basis to state that the results of your 18 19 abnormal return analyses are indicative of the material or non material nature of the revenue 20 information, correct? 21 22 MR. SOMENSATTO: Objection to form. 23 No, I disagree with that. Α. 24 Q. Please explain? 25 Α. So again, what I have done in my analyses

1 as I explain in the report, I measured the relevance 2 of the revenue surprise as well as the surprise of the transaction data and I have tested to see if that 3 information is statistically related to and 4 5 significant related to the abnormal return and the answer there is no, it's not related, it's not 6 statistically related so, in other words, the marginal 8 benefit of having access to some information from 9 Capital One transaction data does not appear to explain or help an investor to decide what security to 10 buy and sell. 11 12 0. You just testified a moment ago that the 13 effects of earnings are exhibited in the abnormal 14 returns in your analysis as set forth in your report, 15 correct? 16 Α. There are a lot of factors, yes, and 17 earnings is one of them. How do you know that you are accurately 18 0. 19 measuring the effect of revenue on abnormal returns when there are a number of other factors that also 20 21 influence abnormal returns include earnings and cash 22 flow information? 23 So the way the study is constructed it's Α. 24 such that I'm measuring information that was non 25 public so it would not have been reflected in the

1 price and so when the information about revenues come 2 out, you expect the price to respond to that 3 information or not respond to that information and so what you observe is that there is not a response to 4 that information. 5 At the same time the revenue information 6 0. 7 comes out, is there other information that's also 8 being disseminated to the market? 9 There is the -- that's possible that Α. there is other information being disseminated. 10 11 0. What dates were you using? Were you 12 analyzing -- withdrawn. Please identify to me the 13 examples on which only revenue data was released to the market as opposed to -- withdrawn. 14 15 Can you please identify for me an example in which the only information that was disseminated to 16 the market was revenue information? 17 18

MR. SOMENSATTO: Objection to form.

So in my study I have constructed it in a way that is correcting Mr. Graham's regression analysis where he's only measuring like you were stating the revenue that's released to the market as his dependent variable against the information about the surprise and the transaction data. What I've changed and what I've done to correct is to say well,

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1 the relevant information to determine when you want to 2 connect the importance of revenue to whether an investor would make a buy and sell decision is to 3 measure not what the revenue that was reported was, 4 but how the market responds to the information that 5 was released in those announcements and so that's the 6 major change the difference between Graham's analysis 8 and my analysis. I'm focusing on the same earnings 9 announcements that Mr. Graham is focused on. So you're focusing on earnings 10 Q. 11 announcements, correct? 12 Α. Correct. Is earnings information released in 13 0. 14 connection with earnings announcements? 15 Α. Yes, an earnings announcement is a release of earnings information. 16 17 Q. So when you are trying to measure the effect of revenue on the price of a stock, what did 18 19 you do to eliminate the effect of the earnings 20 information that was released simultaneously with the revenue information? 21

A. The two pieces of information I intertwined so I didn't separate out that difference. Both of that information is embedded in the abnormal return.

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I'm a little confused. You had said at 1 0. 2 some point in your report that Mr. Graham should have been focused on earnings, not revenue; is that right? 3 In my report I stated there was a number 4 Α. of factors including earnings as other factors that 5 Graham could have focused on. 6 0. In response to my last question are you 8 saying that essentially you are taking earnings 9 information and revenue information as the same? MR. SOMENSATTO: Objection to form. 10 11 Α. No, I think we have to step back and 12 think about what are we trying to analyze here. We 13 are simply trying to ask the question if you had 14 before the earnings announcement access to the 15 consensus estimate of the analysts, if I know the 16 consensus estimate of the analyst and the market knows 17 the consensus estimate of the analyst, I would expect there not to be a significant relationship between 18 19 that consensus estimate and the price response because 20 that consensus estimate is already embedded into the 21 price. 22 What we are adding into the mix is the 23 transaction data from Capital One and saying that 24 marginal additional information that's not known by 25 consensus estimate similar to the framework that

1 Graham has set it up, does that pick up any additional 2 information in the market and the answer is when you 3 look at how the market responds to when revenue is announced in earnings announcements, there is no 4 5 additional benefit from having had access to the transaction data. There's no statistical relationship 6 between the return and the transaction data. So let's first start with the earnings 8 0. 9 announcements. How many other pieces of information are announced at the same time a company announces 10 11 their earnings? 12 MR. SOMENSATTO: Objection to form. Α. 13 It's not an exercise or study I have undertaken in this case. I relied on the same 14 announcements that Mr. Graham relied on. 15 16 0. But you attempted to determine whether or not the release of the revenue information had an 17 impact on the stock price, correct? 18 19 Α. Correct. 20 Q. Mr. Graham didn't attempt to do that, 21 correct? 22 Α. Correct. 23 So in your attempt at determining the 0. 24 effect of the revenue information in the stock price, 25 you also have a ton of other information the company's

earnings release that you didn't factor out, correct?

- A. Like Mr. Graham I did the same thing, I didn't factor that out just like him.
- Q. Mr. Graham was not trying to calculate the effect of a particular piece of information on the stock price, correct?
- A. He was measuring the revenue -- stock price, sorry. No, he was not trying to measure the impact on the stock price, correct.
 - Q. You were?
- 11 A. That's correct.

- Q. There is a ton of other information in the company's earnings releases that could impact that stock price and you did nothing to factor that out in your analysis?
- A. I did not take into account any additional information that might have been in these earnings announcements. I'm simply looking at a cross sectional of hundreds of earnings announcements to see if any of these cross sections their marginal benefit of revenue would become statistically significant and in that last sample of hundreds of earnings announcements revenue is not a factor on a piece of information that appears to explain the price movement.

We talked about confounding events or 1 0. 2 confounding variables earlier in today's deposition, 3 correct? Correct. 4 Α. All that other information that you 5 0. didn't factor out of your analysis to determine its 6 7 impact in the stock price, those would be considered 8 confounding events, correct? 9 Α. Possibly. What I did factor out was 10 abnormal returns, market movements so anything that 11 would occur that day in the market was factored out, 12 but any other company specific piece of information 13 was not factored out and just to clarify, in typical 14 event studies in the framework of an event study one 15 would not necessarily attempt in a cross sectional 16 study to try to disentangle company specific 17 information unless you are analyzing something specific. 18 19 Would you say that you would want to 0. 20 analyze something specific when you are trying to 21 determine whether or not revenue specifically causes a 22 change in stock price? 23 MR. SOMENSATTO: Objection to form. 24 Α. Was that a question? 25 MR. KELLY: Could you please repeat the

question? 1 2 (Record read.) MR. SOMENSATTO: Same objection. 3 I'm analyzing whether the marginal 4 Α. benefit of that information from transaction data from 5 Capital One whether the incremental value of that 6 above the analyst consensus would change the market's 8 response to consensus information. 9 0. So let's focus on that for a second. Which one of your analyses focus on whether the 10 11 Capital One information reflects a change in consensus revenue information? 12 13 I'm not sure I follow the question. Α. 14 you point me to a specific exhibit. 15 Let's do it this way. 0. MR. KELLY: Can you read the previous 16 17 answer. (Record read.) 18 19 Where in your analysis do you compare the Ο. 20 Capital One information and compare that against the consensus estimates and determine whether that has an 21 22 effect on stock price? 23 Exhibit 16 on my report, sorry, Exhibit Α. 24 16 on my report and 17, I specifically did two types of regressions. One regression is looking at the 25

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surprise exactly the way that Graham set it up, but I ran a second regression in the last column which takes the difference between the consensus estimate and the estimate of revenue by the Capital One transaction data so that last regression in the last column specifically measures the incremental value or in other words the estimate that defendant had compared to the estimate from consensus to see if their estimate of revenue provided them with additional information above and beyond what analyst consensus was to see if that additional information would cause a significant price response and as both Exhibit 16 and 17 shows, the incremental benefit of the estimate above and beyond the consensus is not material, in other words, the marginal benefit is not related to the price response so, in other words, it's not clear to me that having access to this marginal information could lead me to make a decision about whether I would buy or sell a security. In either Exhibit 16 or 17 do you have as 0. an independent variable the change between consensus

- estimates and the forecasted revenue from the Capital One transaction data?
- Α. Yes, I just explained in my previous If you look at the last column on Exhibit 16 answer.

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    under the heading 2 and if you look at row D,
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    transaction data forecast, that measures exactly the
    announcement by announcement, the estimate that the
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    defendant had constructed compared to the estimate or
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    consensus from analysts and it looks at that
    difference to see if that incremental value from that
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    estimate would be material and what the result shows
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    across this last sample is that there's no
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    statistically significant relationship between this
    incremental estimate to a consensus so, in other
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    words, to finish my answer, the last column there is
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    an alternative to the specification that Mr. Graham
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    performed.
                  THE VIDEOGRAPHER: We are now off the
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15
           record at 1:48 p.m., October 16, 2015.
                   (Recess taken.)
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                  THE VIDEOGRAPHER: This is tape four of
           the deposition of Dr. Torben Voetmann. We are
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           now on the record at 1:57 p.m., October 16,
           2015.
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                 All right, welcome back, Dr. Voetmann.
           0.
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    Let's keep looking at Exhibit 16 and 17.
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    Voetmann, before the break you identified the
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    transaction data forecast variable or D, item D in
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    Exhibit 16 and 17 as the variable that compared the
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analyst consensus expectations with the forecast from the Capital One transaction data; is that correct and we are looking at Exhibit 16 and 17?

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- Α. Yes, so what I was stating is what I have changed on Exhibit 16 what I changed in regression two compared to regression one is instead of looking at the surprise of the transaction data from Capital One just as Graham had done I changed the measure to estimating what defendant -- how defendant would have estimated the revenue of the company that they are looking at so that in effect this measure indeed forecasted -- transaction data forecast is a measure of the aggregate value of revenue predicted by the methodology that defendant allegedly used so in effect it's a measure of their prediction and I included in there in B the consensus estimates prediction as well so you have two prediction measures. You have the prediction measure of the analyst and you have the prediction measure of the defendants' measurement and so that's what I stated before their prediction of the actual revenues cannot explain the price response.
- Q. Dr. Voetmann, it sounds like you are changing your testimony. You had previously testified that item D reflected the revenue surprise comparing analyst expectations with the Capital One transaction

1 data. Do you stand by that testimony? 2 MR. SOMENSATTO: Objection to form. 3 Α. I may have to correct my prior statement because I was just reading more carefully the footnote 4 5 It nonetheless doesn't change the result that I'm measuring the prediction estimate of the defendants of 6 7 each company's aggregate revenue and so it's an 8 estimate of its surprise relative to the surprise of 9 analysts so when you sum B and D, you get a differential. 10 11 0. As you set up your analysis though, B and 12 D are both independent variables, aren't they? 13 Α. Yes. So you don't include as an independent 14 0. 15 variable the change between the analyst consensus expectations and Capital One's transactional 16 17 information prediction, correct? 18 MR. SOMENSATTO: Objection to form. 19 Α. I didn't include that in this exhibit, 20 I did analyze that change, but it didn't 21 change my results and it didn't change the result in 22 this exhibit. 23 When did you analyze those, that change? 0. 24 Α. It's part of my underlying analysis that 25 I did.

1 0. Do you have any exhibits that reflect the 2 results showing whether or not the change -withdrawn. Are there any exhibits -- earlier today 3 you testified about when you would expect a stock 4 5 price to move, correct? 6 MR. SOMENSATTO: Objection to form. 7 Α. We talked about that, yes. You had testified that, you know, when a 8 Q. 9 company releases quarterly revenue information, you would not expect the stock price to change unless that 10 11 information is a change from analyst consensus 12 expectations, correct? 13 MR. SOMENSATTO: Objection to form. 14 Α. Correct. 15 So in any of your analyses did you 0. analyze whether the Capital One transactional data 16 17 compared with -- withdrawn. In any of your analyses, did you compare 18 19 whether or not the expected revenue surprise as 20 derived from comparing analyst expectations with the 21 Capital One transactional data result in a change in 22 stock price? Yes. 23 Α. 24 0. Please identify where in your report you 25 did that?

- A. I didn't include it in my report. I was responding directly to Mr. Graham's analysis and what you see in Exhibit 16 and 17 is a direct response using a similar measurement of surprise to the way he defined surprise and so this shows to me that what he considered a surprise is not statistically significant related to the transaction data so I did not include any alternative specification of the model since I was responding to Graham's analysis.
- Q. So you are offering no opinions -withdrawn. Let's talk about the validity of the
 analyses that you set forth here. Let's start with
 Exhibit 1. What does Exhibit 1 show?
 - A. Exhibit 1 shows the revenue of Walmart on a quarterly basis. It also shows the price responses to the announcements of revenues.
- Q. So without knowing what the analyst expectations were for revenue, you would have no way to tell whether or not the stock price in a company should go up or down in connection with the announcement of that revenue, correct?
 - A. No, that's not correct.
- Q. So let's look at October '09 on Exhibit
- 24 1. Walmart releases 100,000 in millions of dollars,
- 25 is that 100 billion?

A. Yes.

- Q. So October '09 Walmart releases news that its revenue was \$100 billion. What should the stock price do?
- A. Again, you would have to examine the total mix of information and understand whether that announcement was different than expectations or how it was different from expectations so by looking at the actual revenue itself, you can't draw a conclusion whether the price should go up or down.
- Q. So the fact that the abnormal returns are not at all correlated with revenues, that's to be expected, correct?
- A. I'm not sure if it's to be expected.

 What I'm reporting here is simply demonstrating that if you want to understand the importance of reporting revenues to what happens to market price of Walmart, if you look at that correlation, there is no correlation so the reporting of actual revenues doesn't drive the stock price up or down by itself and the question earlier about consensus, if the consensus is known a week or two weeks before this announcement, the expectation is that at least the information content of the consensus is embedded in the price already.

So to be fair, Exhibit 1 has no bearing 1 0. 2 on whether or not the Capital One transactional information at issue in this case -- so Exhibit 1 has 3 no bearing on whether or not the Capital One 4 transactional information at issue in this case would 5 be of a type of information that a reasonable investor 6 7 would like to know in buying or selling a security? MR. SOMENSATTO: Objection to form. 8 9 So Exhibit 1 is a direct response to Graham's Exhibit 1 in which he compares the same 10 11 revenue that I'm plotting here with the transaction 12 data and this Exhibit 1 demonstrates clearly that Graham's finding of a correlation disappears if you 13 were to just simply understand what a stipulation 14 15 between reporting sales and market response. 16 Q. And without knowing any other additional information, the fact is that just knowing that sales 17 reported and what that number is, you cannot predict 18 19 whether or not the stock price would go up or down, 20 correct? Based on Exhibit 1 this is not a 21 Α. 22 prediction, it's just comparing what the market did

Let's look at Exhibit 2. Why did you

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and what was reported.

include Exhibit 2 in this report?

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- A. I think Graham makes a mistake of looking at the sales of revenues in levels. What might be more interesting to an investor is how sales are changing over time so this Exhibit 2 is changing the scale to looking at changes in revenue as opposed to the level of revenue and again, just simply looking at how sales are changing whether you notice an increase or decrease of Walmart sales against how the market responded to that knowledge, that information, again, shows no significant correlation.
- Q. That's what you would expect for any company, correct?
 - MR. SOMENSATTO: Objection to form.
- A. Not necessarily. You might be able to find circumstances or instances where a company's sales change correlate with the abnormal return, but at least for Walmart and for the majority of all the companies which Graham supposedly finds a correlation, there is no correlation when you do it in changes or using abnormal returns.
- Q. Earlier this morning I specifically asked you whether if a company releases news that quarterly revenues increased as compared with the same quarter the year before would the company stock price change and you answered that by saying that essentially no,

what's relevant is whether or not the change in quarterly revenues is a surprise as compared with analyst expectations, correct?

MR. SOMENSATTO: Objection to form.

- A. I don't recall exactly what I answered to your earlier question, but if I recall what I can recall is we talked about whether knowing a change in revenue would be sufficient information for you to determine whether you expect a price change up or down and if I recall correctly, I said there might not be enough information to make that determination.
- Q. So if you look at Exhibit 2, that chart bears it out that there's no expectation that a stock price would go up and down when there's a change in revenue, correct?
- A. So for Walmart as the highlighted example that Graham chose, there is no correlation between market learning about changes in sales revenues and how it responds to that information.
- Q. That same logic as applied to Exhibits 1 and 2 also applies to Exhibits 3 and 4, correct, that the absolute amounts of the Capital One transactions or the changes in Capital One transaction amounts from one year to the next has no predictive value to determine whether or not a stock price would go up or

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MR. SOMENSATTO: Objection to form.

- A. Correct. I found again here that there's no correlation between the data that defendant had access to in the Capital One transaction amounts and the change in the abnormal return whether he looked at changes or level for Walmart.
- Q. How would you interpret the results in Exhibits 1 through 4?

MR. SOMENSATTO: Objection to form.

Α. So as I explain in my report, my interpretation of these results is what is -- this is a critique or analysis to examine what Graham had done in order for his analysis to confirm whether an investor would buy or sell a security as he stated in his paragraph 3 in his report. He did the correlation of revenue against revenue which to me is not a surprise that you will find they are highly similar, but what's really relevant for understanding the question of whether you would buy or sell a security is to look at revenue or changes in revenue relative to the abnormal returns or returns of the security and so Exhibits 1 through 4 demonstrate for Walmart that there is no correlation between having access to the revenue data or how that revenue is correlated to the

1 price changes. 2 But you never included as a part of your analysis whether or not the Capital One transactional 3 data was predictive of a revenue surprise, did you? 4 Α. I believe I did in Exhibit 16 and 17 as 5 6 we just discussed. Focus on Exhibits 1 to 4, do Exhibits 1 0. 8 to 4 have anything to do with whether or not the 9 Capital One transactional data is predictive of a revenue surprise? 10 11 Α. In 1 to 4 I'm simply responding to Graham's Exhibit 1 where he demonstrates a historical 12 13 correlation between the data sets, the data series and I'm demonstrating that that correlation is 14 15 non-existent if you relate it to returns as opposed to 16 revenue against revenue. You said Graham's Exhibit 1 I believe. 17 0. Which exhibit are you referring to? 18 19 I apologize, it's in his report paragraph 20 46 on page 14. It's the first chart I see he presents 21 in his report. 22 Q. The chart at the bottom of page 14 of Mr. 23 Graham's report, Mr. Graham doesn't analyze the effect 24 of the revenue announcement on the stock price, 25 correct?

A. Correct.

- Q. Isn't the point that Mr. Graham is making here is that the Capital One transactional data is correlated with and predictive of the actual not yet reported revenue of the company?
- A. This chart itself is insufficient to determine whether it's predictive. In my opinion what he's doing is looking at historical transaction data and he's noticing that the trend of that data is similar to the aggregate data of Walmart.
- Q. What does the chart on the bottom of page 14 of Mr. Graham's report show?
- A. It shows that there is a trend of transaction data amounts although at a scale of much smaller total amounts, but the trend of those small amounts are similar in trend to the total amounts of Walmart's -- if I look at this exhibit, he has a typo on the Y axis. He says the transaction data from Capital One is in billions, but I believe it's in millions so he's saying half a million to a million is similar to 120 billion.
- Q. Dr. Voetmann, do you dispute the accuracy of the chart as set forth on page 14 of Mr. Graham's report?
- MR. SOMENSATTO: Objection to form.

1 Α. No, he's simply -- as he sourced it he's 2 just sourcing the data that was provided to him in the DONE file and what he had downloaded for Walmart I 3 believe would have to be from Walmart the total 4 revenue data. I don't think he -- I can't speak for 5 Mr. Graham, but I don't think he would have chosen to 6 7 use the sales data in the DONE files. MR. KELLY: Could you read back the last 8 9 question and answer. (Record read.) 10 11 Α. Can I clarify one thing in the answer? 12 0. Yeah. He wouldn't have used the total sales 13 Α. 14 data for the company in the DONE files, not the -- he 15 relied on the sales data from Capital One transactions. 16 17 0. Could you please, Dr. Voetmann, describe what's in Exhibit 5 of your report? 18 19 Sure so Graham introduced after the 20 Walmart example he selected 20 additional examples 21 that he presented in Exhibit E and what I have done in 22 my Exhibit 5 I have compared the correlations that 23 Graham found to the correlations if you looked at the 24 sales data versus returns or the changes in sales data 25 versus returns.

Is this a chart -- does Exhibit 5 reflect 1 0. 2 the correlation values with respect to the information 3 that was set forth in Exhibits 1 to 4 as in regards to Walmart? 4 Not necessarily. In Exhibits 1 to 4 I 5 Α. chose the exact date range that Graham used, however, 6 7 in Exhibit 5 I'm using the date range he chose in his 8 Exhibit E so I believe that's why you might see the correlation estimates are slightly different for 9 Walmart nonetheless it's not significant. 10 11 Let's go to Exhibit 7. 0. 12 Α. Okay. You see the first line is Graham 13 0. correlation of revenues to transaction amount. 14 15 sets forth his results. I understand you might have some objections to methodology, but let's just focus 16 on the math and whether the statistics tests were 17 18 performed properly. Do you have any dispute with 19 respect to the way in which Mr. Graham performed the 20 analysis that's set forth or described on the first line of Exhibit 7? 21 22 MR. SOMENSATTO: Objection to form. 23 The first line is simply stating exactly Α. 24 what Mr. Graham did. I disagree with his reasoning

for running the correlation the way he did, but if you

1 ask me whether there is -- I'm disputing whether you 2 can run a correlation between two series, I'm not disputing that fact. I'm disputing how you interpret 3 the results of that. 4 You don't dispute the fact that the 5 0. 6 Capital One information present on defendants' laptops at issue in this case were correlated to a 8 statistically significant extent with respect to 132 9 companies in this case? MR. SOMENSATTO: Objection to form. 10 11 I have no reason to disagree with Α. 12 Graham's representation that when you are plotting the 13 trend between the transaction data and the aggregate 14 data that the trend seems very similar. 15 Let's go to the next line. 0. correlation of revenues to abnormal returns. 16 17 bearing if any does this analysis have on evaluating whether the Capital One transaction data in 18 19 defendants' possession was of a type that it was valuable to a reasonable investor? 20 21 MR. SOMENSATTO: Objection to form. 22 Α. So I looked at -- I wanted to examine 23 whether the total revenue how I responded or 24 correlated with the returns. That would guide me in 25 understanding my expectation for what I would find

when I looked at the transaction data versus the returns and as you can see whether you are looking at the total aggregate revenue or you're simply looking at the small portion of transaction amounts that the defendants had access to, there is hardly or there is between 17 and 2 companies that had significant correlations in sharp contrast to 132.

- Q. But let's be honest here. The results in the second through the fourth test as set forth in Exhibit 7 are not at all surprising, correct?

 MR. SOMENSATTO: Objection to form.
- A. I will correct that to say it's certainly not surprising in row one that when you call it revenue against revenue that you find a high number of significant related companies. I think it really depends row 2 to 4 it's plausible not having done the analysis, but you have to look at a larger sample of companies whether these results hold, but for the companies that the defendant looked at there is little relationship between revenue and returns.
- Q. But isn't it true that's not at all surprising given the fact that in none of these analyses in lines 2 to 5 in Exhibit 7 are you taking into account whether or not there is a revenue surprise?

1 MR. SOMENSATTO: Objection to form. 2 Α. So I think you can argue that 1 through 5 if in fact the consensus estimate are embedded into 3 the price and there is no additional earnings surprise 4 5 above that, then you don't expect to find a 6 significant correlation. MR. KELLY: Could you please read back not this one but the prior Q and A. 8 9 (Record read.) Dr. Voetmann, when you testify that it's 10 Q. 11 not all surprising that when you correlate revenue to 12 revenue you find statistically significant 13 correlations, you are talking about the analysis that Mr. Graham did when he calculated whether the actual 14 15 revenue reported by companies was correlated with the Capital One transaction data defendants had access to, 16 17 correct? 18 Α. Correct. 19 Why isn't it all surprising to you that 0. that result is true? 20 21 Α. Simply because you are measuring the 22 population against a subset of itself so that's not 23 surprising that those two are related. 24 Is that result obvious to you? Q. 25 MR. SOMENSATTO: Objection to form.

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I think you have to examine one at a
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           Α.
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    time, but it seems obvious to me that if you are
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    looking at revenue and you're measuring a subset of
    revenue of that revenue that there is a high
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    probability that it will be correlated.
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                 Let's try to switch gears for a minute.
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    Dr. Voetmann, would it be fair to say that what's most
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    important to a potential investor is the firm's
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    ability to generate enough revenues to cover its
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    expenses?
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                  I wouldn't necessarily agree with that
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    statement.
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                 That is essentially your statement as set
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    forth in this report correct. There is an ellipsis
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    there, but we can turn to it. You state on the top of
    page 7, paragraph 12, ultimately, what is most
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    important to the health of a firm and a potential
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           Q.
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(Record read.) 1 2 Α. You are missing the last half of the 3 sentence which is i.e. to generate positive earnings and steady cash flows. 4 5 0. So is your testimony that without the i.e. you disagree with that statement? 6 MR. SOMENSATTO: Objection to form. Α. No. 8 9 So I understand that was not the full 0. 10 quote, but do you agree with the statement in your 11 report that ultimately what's most important to the 12 health of a firm and a potential investor is the 13 firm's ability to generate enough revenues to cover 14 its expenses? 15 Α. I think as a general matter I think it's 16 a fair statement that in order to be having a 17 successful business you need to generate sufficient 18 revenue to cover your expenses otherwise again as a 19 general matter you would not be in business for long. 20 Q. So, Dr. Voetmann, could you please look 21 at paragraph 7B? 22 Α. Okay. 23 You state that Mr. Graham confuses 0. 24 correlation with causation in that second sentence, do 25 you see that?

1 A. Yes.

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- Q. Where in Mr. Graham's report does he make any conclusions or observations with respect to causation?
- Α. So as I understand it in paragraph 3 of his report he's asked to examine whether the transaction data would make an investor or could assist an investor in deciding whether on whether they would make a buy or sell transaction. Let me look at his report. He's asked to evaluate whether a reasonable investor would consider this information the Teradata to be important when making a decision to buy or sell securities in those companies so I read that as his analysis is supposed to support -- the analysis he's providing is supposed to support his conclusion to establish whether or not an investor would make a buy and sell decision and in my opinion simply reporting a correlation is not sufficient analysis to reach a conclusion of whether or not an investor would make a buy and sell decision.
- Q. I'm confused now. Later in paragraph 7B you talk about that Mr. Graham should have considered the correlation between the transaction data and the stock price returns -- withdrawn.

So the causation you're talking about is

1 you're saying that Mr. Graham confuses correlation 2 with causation because by concluding that the Capital One transactional data is predictive of not yet 3 reported company revenues -- withdrawn. 4 So I'm confused by your answer, Dr. 5 6 The correlation analysis has nothing to do Voetmann. with what an investor will do with the information, correct? 8 9 I would agree with you that the entire first half of the Graham report where he talks about 10 11 correlation does not answer the question of whether an 12 investor would make a buy and sell decision. Let's focus on the actual correlation 13 0. then before we turn to opinions based on the actual 14 15 correlation. Your statement that Mr. Graham confuses correlation with causation, does that relate to 16 17 whether or not the Capital One transactional data causes the actual not yet reported revenues or does it 18 19 relate to something else? 20 Α. Something else. 21 What is that? 0. 22 Α. So in my opinion what he should have 23 considered is whether or not if you had access to the transaction data he should have done a study to 24

determine whether that data could lead you to reach a

decision to buy or sell a security.

- Q. How would he do that study?
- A. It's not something that I've attempted to undertake. I'm simply responding to Graham's analysis that he did not do that so as I sit here right now I have to think about how you would do such study, but I think as a first pass you at least would want to know if that information, the transaction information, is related to price responses, returns, when earnings are released to the market and as I've demonstrated in Exhibit 1 through 6 there is no correlation between those returns and transaction data.
- Q. What were the defendants doing with the Capital One transactional data as they were making their investment decisions?
 - MR. SOMENSATTO: Objection to form, foundation.
- A. I have not seen any documents in the production provided to me that would suggest to me that I could understand what they did with the data.
- Q. For all you know they were taking their predictions of revenue from the Capital One transaction data and comparing it with consensus earnings estimates -- sorry, consensus revenue estimates and deciding whether or not the release of

that information would result in a stock drop or 1 2 increase? MR. SOMENSATTO: Objection to form. 3 The DONE files or the production of 4 Α. 5 materials that have been provided to me it's what I 6 see is that they are attempting to estimate or come up with an estimate for total earnings for a given 8 In those files, the DONE files, there's no 9 consensus estimate information. It's just the actual 10 earnings and the transaction amounts. 11 For clarity, you said earnings in your 0. 12 last response, do you mean earnings or revenues? 13 Α. I appreciate that, revenue. 14 Q. But for all you know, there's other 15 documents out there that show that defendants are in 16 fact looking at consensus revenue estimates, correct? 17 Α. It's possible they looked at consensus 18 estimates. I know Graham put forward some consensus 19 estimate and there might have been a single file, I 20 can't recall as I sit here right now, among hundreds 21 of files that contain some data on consensus 22 estimates, but in the DONE files where they as I 23 understand it did their analysis of estimating total 24 revenue, I didn't see any consensus estimate. 25 Q. Going back to your point about causation,

is it your testimony that in order to issue an opinion about whether information is of the type that an investor would like to know in making an investment decision, the person offering that opinion would need to do a causation analysis to determine whether access to that information made the person invest in the stock?

MR. SOMENSATTO: Objection to form.

- A. I think it would be the responsibility of someone offering that opinion to at least examine the total mix of information and contextualize whether a piece of that information such as revenue was material and as I reviewed Graham's report, I didn't see him offer such opinion that the transaction data was statistically significantly related to returns.
- Q. Let's focus on the causation piece because you complain or you offer an opinion that Mr. Graham's analysis failed for failing to do a causation analysis. Are you aware of any academic journals or other publications that stand for the proposition that in order to weigh in on materiality information, there needs to be a causation analysis done to determine whether that information actually caused an investor to buy or sell a security?

1	A. I believe if you want to publish in a
2	peer reviewed journal you might include a univariat
3	analysis which might include correlation analysis of
4	trends of sorts, but I would also believe that on top
5	of that you would build a multivariat analysis to at
6	least confirm the trends you see in the correlations.
7	The correlation by itself would not in my opinion be
8	sufficient.
9	MR. KELLY: Let's take a very quick
10	break. I'm trying to get through a lot here.
11	THE VIDEOGRAPHER: We are now off the
12	record at 2:43 p.m., October 16, 2015.
13	(Recess taken.)
14	THE VIDEOGRAPHER: This is tape five of
15	the deposition of Dr. Torben Voetmann. We are
16	now on the record at 2:57 p.m., October 16,
17	2015.
18	MR. KELLY: Could you please read back the
19	last question and answer.
20	(Record read.)
21	Q. Just to follow up, the analyses that you
22	set forth in that answer are analyses that you
23	performed to determine causation?
24	MR. SOMENSATTO: Do you understand the
25	question?

Α. I'm not sure I understand the question. 1 2 0. I'd asked you previously what peer 3 reviewed journals -- whether there were any peer reviewed journals that stand for the proposition that 4 in order to prove materiality of a certain set of 5 information you'd have to do a causation analysis to 6 determine that information caused an investor buy or 8 sell a security and you gave an answer in response and you mentioned a few different tests. The question I 9 have is whether those tests that you mentioned in that 10 11 answer were tests to conclude causation or whether 12 those were just simply correlation tests? You would include causation tests. 13 Α. That would be a multivariat causation 14 Q. 15 analysis? 16 Α. Typically, yes. 17 Q. You have seen in peer reviewed academic journals the authors of that paper employing a 18 19 causation analysis to conclude materiality with respect to certain sets of information? 20 21 Α. Yes. 22 Q. Please identify what publication or 23 publications those are? 24 Α. That pretty much covers any of the peer 25 reviewed journals.

Your testimony is that all the peer 1 0. 2 reviewed journals when they determine materiality use 3 causation analysis? MR. SOMENSATTO: Objection to form. 4 I was responding to your general question 5 Α. about whether or not you need to establish causation 6 7 to get a paper published in a peer reviewed journal and my answer is as I understand it all peer reviewed 8 journals would expect you to find causation in order 9 to make any affirmative conclusions about your 10 11 findings. So, Dr. Voetmann, just to confirm your 12 Q. 13 testimony that in any academic journal that's peer reviewed that in order to make any conclusions 14 15 regarding materiality, that the authors of that study would need to do a causation analysis; is that 16 17 correct? MR. SOMENSATTO: Objection to form and 18 19 testimony, mischaracterizes. When I think of peer reviewed 20 Α. publications, I'm not sure I think about the 21 22 definition of materiality as we are discussing it here 23 in terms of if you are trying to connect materiality 24 as we are discussing in this particular case to other 25 I think it's reasonable to expect that studies.

1 anyone who wants to publish in a peer reviewed journal would need to establish with some form of reasonable 2 scientific methodology that there's some causation in 3 order to reach some conclusion about their findings. 4 Dr. Voetmann, I don't think you are 5 Q. 6 answering the question I asked. MR. KELLY: Could you please read back the question. 8 9 (Record read.) MR. SOMENSATTO: Objection to form. 10 11 I think an author would need to do some Α. 12 form of multivariat or causation analysis to establish 13 their findings, whether or not their findings have a level of materiality or level of significance. 14 15 Dr. Voetmann, you are not opining in this 0. case that investors could care less about revenue 16 information, correct? 17 18 Α. Correct. 19 MR. SOMENSATTO: Objection to form. 20 0. Please turn to paragraph 13 of your 21 report. In that paragraph you note that Mr. Graham 22 cites to a few publications that were taken out of 23 context and misinterpreted. Doesn't Mr. Graham 24 identify the fact that -- withdrawn. 25 Dr. Voetmann, do you dispute the fact

1 that in the Graham, Harvey and Rajgopal study that the 2 second most important firm performance measure was cited by 401 financial executives to be revenues? 3 Α. It depends how you read the table that 4 5 Mr. Graham cites. It's listed among four other 6 variables having 36 similar ranks by executives so if 7 you rank all 4 as having 36 and revenues one of the 8 four, it's not unreasonable for him to say it's an 9 important or sorry, among the second highest ranked metrics. 10 11 0. Do you agree with that interpretation? I think it's not a fair characterization 12 Α. 13 of the paper. The paper clearly states that out of 14 all these financial executives by a large margin 15 earnings is the most important. Next to that you have operating cash flows, revenues and a couple I think 16 17 they said free cash flow and a couple other cash flow metrics so among those group of key metrics asked of 18 19 the executives, clearly earnings is by far the most 20 important. 21 Does Mr. Graham dispute that fact? 0. 22 Α. No. 23 In fact, he acknowledges that earnings is 0. 24 recognized ahead of revenue, correct?

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He does.

Dr. Voetmann, do you place revenue among 1 Q. 2 the top five important measures of firm performance? MR. SOMENSATTO: Objection to form. 3 It's not a question I can answer with 4 Α. 5 that level of information. Why not? 6 0. Because I think it's specific to the 7 Α. 8 company you are evaluating. 9 What types of companies would you place 0. more value on revenue? 10 11 It's not a question I have undertaken in Α. 12 my report to analyze, but as I sit here now it's not 13 unreasonable to think that if you are valuing a 14 company like a start up tech company, you are valuing 15 it using a revenue metric as opposed to earnings. 16 0. What other companies would you rely more on revenue -- withdrawn. In how many instances have 17 you performed a discounted cash flow analysis of 18 19 companies? 20 Α. Many. 21 In how many instances of those have you 0. 22 used revenue information in the analysis? 23 Revenue is part of income statements so Α. 24 if you are doing a strict discounted cash flow 25 analysis, you would have revenue as part of that

analysis.

- Q. So is it your testimony for every single discounted cash flow analysis that you have done you have included revenue information in that analysis?
- A. It depends on whether or not we include in that discounted cash flow multiples analyses where you use a price earnings multiple or some other type of multiple, but for a strictly DCF where you are projecting income statements and cash flow statements for the majority of those I would include revenue.
- Q. Would it be fair to say that revenue is an important variable in determining the value of the company?
 - MR. SOMENSATTO: Objection to form.
- A. I think you have to again look at the total mix of information and the contribution from that revenue information. You have to examine an understanding whether that revenue information is contributing to increasing cash flows or decreasing cash flows for that matter in order to determine whether or not just knowing revenue levels is important.
- Q. Please turn to paragraph 14 on page 8 of your report. You state it is highly unlikely in my opinion that the sales transaction data obtained by

1 the defendants was material to a reasonable investor, 2 do you see that? 3 Α. Yes. Can you please explain this conclusion? 4 0. 5 Α. Sure. So based on my analysis both 6 correcting Graham's correlation analysis where I find that there's no correlations between revenue and 8 returns based on my regression analysis where I 9 include transaction data and returns, the marginal contribution that the Capital One transaction data had 10 was not statistically significant returns. 11 12 Q. Dr. Voetmann, you had testified earlier 13 that you didn't include any analysis in determining whether or not the Capital One transaction information 14 15 predicted ability of company revenues not yet reported 16 revenues as compared with analyst expectations 17 contributed to abnormal returns, correct? I was -- I could not hear the whole 18 Α. 19 question. 20 MR. KELLY: Can you read it back, please. 21 (Record read.) 22 Α. I'm not sure I fully understand the 23 My analysis is exactly showing whether the question. 24 contribution of the not yet reported transaction data 25 if you include that as an independent variable with

1 consensus surprises whether or not that could explain the price responses. 2 Let's go over that then. 3 These are 0. Exhibits 16 and 17 you are referring to? 4 5 Α. Yes. Let's walk through that again. So you do 6 0. 7 not include as an independent variable the expected 8 revenue surprise as predicted by the Capital One 9 transaction data in either of these Exhibits 16 and 10 17, correct? 11 Depends on how we define a surprise. Α. 12 you look at row C, it is looking at the growth in the 13 Capital One transaction data for a given quarter year 14 over year so to that extent it's what's the surprise 15 of the change in that transaction data. If you look 16 at row D, I'm specifically calculating defendant's 17 expectation of total revenue for a given quarter 18 compared to how that expectation was a year ago for 19 that quarter so depending how we define surprise I'm

Q. Dr. Voetmann, does revenue surprise have a meaning in the financial economics industry?

measuring the impact of how defendants' expectations

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are changing.

A. To me it does. When you read the academic literature on analyzing earnings surprises,

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the definition of an earnings surprise is the actual earnings minus the consensus divided by actual earnings so you can see how off was the consensus compared to when the actuals came out. 0. Sorry, go ahead --However, that's not the definition that Α. Graham chose to use for a surprise in his report and so what I have done in my analysis in order to understand exactly what Graham did, I accepted his definition of a surprise and applied that in this analysis here where he's not comparing consensus to actual, he's simply looking at consensus or actual sales as a ratio. Do you think that Mr. Graham did the 0. analysis correctly? I do not. Α. Q. So why did you follow his methodology? Because what we are attempting to answer Α.

A. Because what we are attempting to answer here is the question as Graham set out in his assignment in paragraph 3 whether or not the information from the transaction data could be used to form some opinion about whether you would buy or sell a security so you are looking at information that is immediately prior to an earnings announcement so that's different from the academic literature which is

looking at how did the market respond to actual earnings where you can calculate the surprise of those earnings and then observe by looking at the abnormal return how the market responds.

What Graham did instead he took the

consensus estimate as a measure of surprise relative to actual last year reported sales and said is it growing or declining for the current quarter and he's comparing that to what was ex-post reported by the company so he's actually taking the components of the independent variable and putting part of the component on the dependent side and the other part on the independent side so he's mixing up the traditional methodology that's used in academic literature for earnings prices.

- Q. Let's focus on your Exhibits 16 and 17, your methodology. Do you think that you did these regression analyses correctly?
- A. In order to answer the question we are attempting here which is whether the information of the transaction data could be used to determine whether you make a buy or sell decision, yes.
- Q. So let's walk through what this means so A, what is an intercept in connection with a regression analysis?

1 Α. That's just the place in which the value 2 intercepts zero sales. So let's look at analyst expectations. 3 0. 4 What do you expect ex-anti, what do you expect analyst 5 expectations effect to be on whether there's abnormal 6 returns? We are looking at the abnormal returns? Α. 0. Focusing on your analysis? 8 9 Α. Yes. 10 Q. What would you expect there to be --11 Focusing on analyst expectations in your withdrawn. 12 analyses, what would you expect the analyst 13 expectations variable to have in predicting whether or not there's abnormal returns? 14 15 MR. SOMENSATTO: Objection to form. 16 Α. No impact on the abnormal return. 17 Q. Why is that? Because remember the definition of the 18 Α. 19 analyst expectation, this is the same definition that 20 Graham uses, it's the consensus that's known to the 21 market immediately before I think Graham said one to 22 two weeks before the earnings announcement and it's 23 the sales of that company a year ago. All that 24 information has been known by the market for over a 25 year at least sales from a year ago and the consensus

has been known for a while. All that has been embedded into the current stock price so if you believe in market efficiency, then all that information is already embedded into the price and so I have no reason to expect that there will be a significant additional impact from analyst expectation as defined by Graham here because that information has already been incorporated into the price.

- Q. So let's turn to the next variable, growth in Capital One transactions. What effect would you expect that variable to have on abnormal returns?
- A. This is the interesting variable to examine because that tells us something about whether or not this non public information when you look at a large sample cross sectionally can explain some of the return patterns so what we have here is the transaction -- in regression one the transaction data that the defendant had access to for that current quarter relative to that same transaction data a year ago so they can observe whether or not they believe the transaction data should guess revenue is going up or down and so if in fact I believed that this information would be material, I would expect to find a significant co-efficient on that variable and I do not, in other words, this information across all these

1 companies and these announcements does not appear to 2 have any impact on the price of the securities when the actual sales is released to the market. 3 I'm going to follow up on that. 4 0. confused by your answer. So let's say in time period 5 6 T zero Capital One transaction data is X and then in T one the Capital One transaction data is 2X? 8 Α. Okay. 9 0. What effect does that have on abnormal 10 returns? 11 MR. SOMENSATTO: Objection to form. None. 12 Α. 13 0. Why? 14 Α. Because this shows when you run this 15 regression the co-efficient is .01, it's a very 16 marginal impact. 17 0. Let me see. Let's talk about revenue for a second. If revenue of a company in T one was X and 18 19 revenue in T two goes to 2X, what expectation does 20 that have -- what expectation would you have on the 21 abnormal return of that security? 22 Α. This regression would not tell me or 23 answer that question. 24 0. Let's just take a step back for a second 25 then when you are dealing with revenues, revenue goes

from X to 2X from time period one to time period two.

How does the stock price move?

- MR. SOMENSATTO: Objection to form, asked and answered.
- A. So if the -- now we are back in as I defined an earnings surprise. If I wanted to understand the impact of reporting actual earnings of 2X, I would compare this 2X to the consensus and if the consensus was 2X as well, my expectation would be that there's no impact. If the consensus was higher or lower, I could form an opinion on whether it would be a positive or negative impact.
- Q. Why doesn't that same explanation apply with respect to whether or not the Capital One transaction data goes up from one period to another?
- A. First of all, you don't have a consensus estimate for transaction data so what you need -- you need the estimate and you need to compare it to the actual so what this regression is doing it's saying immediately prior to the earnings announcement what was known by the defendant and what was known by the analyst in the market. Do those two pieces of information explain the abnormal return, the answer to that is no.
 - Q. In order to determine whether or not a

1 revenue surprise has an effect on a company's stock 2 price you would need to -- withdrawn. Dr. Voetmann, in order to determine 3 whether or not a change in revenue has an effect on a 4 company's stock price you would need to take into 5 6 account analyst expectations, correct? Α. Correct. So let's assume you wanted to determine 8 0. 9 whether 1/100 of the company's revenue would have a -withdrawn. You had testified earlier -- withdrawn. 10 11 Dr. Voetmann, why aren't you treating the 12 Capital One transaction information in your regression 13 on Exhibit 16 and 17 consistent with the way you would 14 be treating revenue information in determining whether 15 or not the release of that information to the market 16 has an impact on company stock price? 17 Α. Can you read that back. (Record read.) 18 19 If I understand the question correctly, Α. 20 we are here to establish whether or not the 21 information that the defendant had access to would put 22 them in a situation where they could make a decision 23 prior to the earnings announcement whether they would 24 buy or sell a security so looking at it ex-post 25 defeats the purpose of understanding whether they

1 would make a buy or sell decision because then the 2 profit is already gone from that strategy if there 3 were a strategy. MR. KELLY: Could you please read back 4 that answer. 5 (Record read.) 6 7 0. Whenever you're trying to analyze the effect of the release of information in the market 8 9 though don't you need to analyze it ex-post? Yes, if you are measuring earning 10 Α. surprises you are trying to ask the question which is 11 a little bit different which is if the market was 12 13 surprised by the reported earnings, how did they 14 respond, but at that point in an efficient market as 15 soon as that announcement occurs, the market price would adjust and so a strategy to buy or sell that 16 17 security after the announcement would not necessarily be fruitful or you wouldn't be able to make any profit 18 19 from it. Variable C on Exhibit 16, you do not 20 0. 21 factor in whether or not the Capital One transactions 22 -- withdrawn. There's no consideration of analyst 23 expectations in connection with item C, correct? 24 C is purely looking at Capital One Α. 25 transaction data.

1 Item D, there is no consideration of 0. 2 analyst consensus expectation in connection with this item, correct? 3 Α. If you look at the variable in isolation, 4 5 the answer is no, but you have to look at the regression in totality because in row B you have the 6 consensus estimate which is included in all three 7 8 regressions here. 9 0. What's an independent variable? It's the variable that you're checking to 10 Α. see if it's related to the dependent variable. 11 12 0. So is B analyst expectations an 13 independent variable or dependent variable situation? All the variables listed here are 14 Α. 15 independent variables. 16 0. So you're comparing item B, the effects 17 of item B analyst expectations on abnormal returns, correct? 18 19 Α. Yes. You are comparing item C, growth in 20 Q. 21 Capital One transactions with abnormal returns, 22 correct? 23 In order to compare it, you have to use Α. 24 the co-efficients on intercept B and either C or D in 25 order to calculate the expected abnormal return.

I don't think you answered my question. 1 0. 2 MR. KELLY: Could you please read it back. (Record read.) 3 By item C you mean the co-efficient on 4 Α. 5 the variable for growth in Capital One transactions? 6 You are comparing item C growth in Q. 7 Capital One transactions and determining how changes in that variable effect or are associated with 8 9 abnormal returns, correct? 10 Α. Correct. 11 The same with item D, transaction data 0. 12 forecast, you're comparing how changes in transaction 13 data forecast is associated with abnormal returns, 14 correct? 15 Correct. Α. 16 0. At any point in this analysis are you 17 analyzing whether the transaction data forecast by defendants as compared with analyst expectations has 18 19 an effect on abnormal prices, abnormal returns? 20 Α. So as I stated when you want to compare, 21 you can't compare an independent variable in a multi-22 regression in isolation. You have to look at the mix of all the variables so in order to estimate what the 23 24 abnormal return is from this regression, you would 25 have to look at both B and C combined as well as B and

1 D combined. 2 B is the consensus estimate from analysts so, for example, if you look at two, there is a 3 positive co-efficient on B although it's not 4 5 significant so it might as well be zero, but you 6 expect that to have a positive impact -- the consensus to have a positive impact on the abnormal return 8 although it's statistically insignificant. 9 D, the data that defendants had access to and their estimate of total sales immediately prior to 10 11 the earnings announcement in fact had a negative 12 co-efficient so you would combine both of those in 13 order to understand how that effects the dependent 14 variable. 15 These are all independent variables B 0. 16 through D, correct? 17 Α. Correct. So there is no determination as to 18 0. 19 whether or not the transaction data forecast as set 20 forth by the -- withdrawn. 21 Dr. Voetmann, you could have analyzed 22 whether the transaction data as forecast by the 23 defendants predicted a revenue surprise, correct? 24 MR. SOMENSATTO: Objection to form. 25 Depends how you define revenue surprise. Α.

I'll re-ask the question. Dr. Voetmann, 1 0. 2 you could have analyzed and included as an independent variable whether the transaction data forecasted by 3 defendants predicted an increase or decrease in the 4 5 consensus analyst revenue forecast, correct? MR. SOMENSATTO: Objection to form. 6 7 Α. I'll try to restate and see if we agree 8 on the question. If you are asking if I move the 9 analyst expectation as the dependent variable and regress that against the transaction data forecast? 10 11 0. No, that's not what I'm asking. You 12 could have -- withdrawn. If I were to tell you that 13 the Capital One transaction data is predicting revenues of a billion dollars, would you predict that 14 15 the stock price would go up or down? MR. SOMENSATTO: Objection to form. 16 17 Α. I don't have that specification here, but if you told me that the transaction data changed by a 18 19 billion dollars in its prediction of revenue, 20 co-efficient D tells me the abnormal return would go 21 down, but it's not statistically significant so it may 22 as well just be zero. 23 What I'm telling you is let's talk about 0. 24 the variables, but put aside the actual results. 25 question is if I were to tell you that the defendants'

1 projections of company A's revenue was going to 2 increase from the prior year to the current year by a billion dollars, how would you predict the stock price 3 of the company would react? 4 MR. SOMENSATTO: Objection to form. 5 That would be insufficient information 6 Α. 7 for me to make any prediction. Why is that? 8 Q. 9 Ignoring this all I have information about is a change in revenue. I would need to look at 10 11 the totality and the total mix of information and determine whether or not a change of a billion dollars 12 was expected or not or whether or not that information 13 of a billion dollar increase would lead the market to 14 15 change the price either up or down. When would -- what's the role of revenue 16 0. 17 expectations on whether or not the release of that information would make the market price the security 18 19 up or down? 20 Α. I have a hard time hearing. 21 (Record read.) 22 Α. The role of the transaction data information, again, I think it's insufficient 23 24 information to draw any conclusion whether for me to 25 determine whether the price would go up or down.

Q. Let's put it this way. If the transaction data forecast was in line with analyst expectations of revenue, would you expect the price of the company -- price of the security to go up or down?

MR. SOMENSATTO: Objection to form.

- A. As it's measured in my analysis and in Graham's analysis, if you look at the analysts expectation and that expectation is already embedded into the market because the market knows about that expectation, you are telling me that the expectations that the defendant had was exactly the same as the market, the consensus, as I sit here right now I have no reason to believe that that information would tell me whether the price would go up or down or the price reaction would be any different whether I knew that information or not.
- Q. If the defendants' projections of company revenue exceeded the analyst expectations of revenue, how would you expect that to effect the stock price of the company?
- A. Again, it's insufficient information for me to make any conclusion about that. The prediction that the defendants came up with was sometimes contra-indicative to what actually happened even though it was different from the consensus.

1 0. Let's focus on a hypothetical. If you 2 are able to predict that revenue is going to proceed 3 analyst expectations and that's the only thing you know, does the stock price go up, does it go down or 4 does it stay the same? 5 MR. SOMENSATTO: Objection to form. 6 7 Α. In your hypothetical if you predict an 8 estimate of revenue to be greater than the consensus, 9 you might have an expectation that the price should go up, however, that is not determined just by those two 10 11 pieces of information because it could be that the 12 actual sales came out below consensus in which case 13 you might actually make the wrong bet. 14 expectation price going up is reversed and it goes 15 down even though you had an expectation that was 16 greater than the consensus. 17 Q. Dr. Voetmann, do you agree -- in 18 paragraph 17 you refer to a study cited by Mr. Graham, 19 Rees and I'm going to leave it there and call it the 20 Rees study. The authors state next to earnings, revenues forecasts are perhaps the most widely 21 22 followed performance metric by analysts. Do you 23 disagree with that statement? 24 Α. No, that's a statement that was provided 25 by the author. I'm confused there. You are reading

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1 the statement in sentence two of paragraph 17? 2 0. Yes, so let me just restate it. Dr. 3 Voetmann, do you agree or disagree with the following statement; next to earnings, revenues forecasts are 4 5 perhaps the most widely followed performance metric by 6 analysts? MR. SOMENSATTO: Objection to form. Α. I think that statement is taken out of 8 9 context. 10 Q. Do you have an opinion one way or the 11 other whether you agree with that statement? 12 Α. I have not done an analysis to confirm 13 whether I agree or disagree with that statement. In paragraph 18 Mr. Graham cites 14 0. 15 Fairfield, Ramnath and Yohn and they state in their 16 article that sales growth is the fundamental driver of 17 firm growth. Dr. Voetmann, do you agree or disagree with that statement? 18 19 MR. SOMENSATTO: Objection to form. 20 Agree that's what's written in the article or 21 that that's a correct statement? 22 MR. KELLY: I'm asking whether you agree 23 with that statement, not whether it's written 24 in the article. I have insufficient information in order 25 Α.

1 to determine whether that's a fair or true statement. 2 0. As used in that sentence, what does firm 3 growth mean? MR. SOMENSATTO: Objection to form. 4 I don't have the article in front of me 5 Α. 6 so I cannot say with certainty what that means. Let me ask you in the next sentence when Q. 8 you refer to firm growth, what do you mean? 9 So when I think of firm growth, I think of growth in the market value of the firm. 10 11 Dr. Voetmann, let me ask you did you read 0. 12 the Fairfield, Ramnath and Yohn article prior to 13 issuing your report? I reviewed the article prior to issuing 14 15 the report, yes. Did you read the sentence sales growth is 16 0. the fundamental driver of firm growth? 17 Α. I did. 18 19 Did you read the Rees article referred to 0. in paragraph 17 prior to issuing your report? 20 I did. 21 Α. 22 Q. Dr. Voetmann, did you read the Beaver 23 article referred to in paragraph 16 of your report? 24 I did. Α. 25 Dr. Voetmann, please turn to paragraph Q.

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         Dr. Voetmann, you state Mr. Graham's correlation
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    analysis neither proves a predictive relationship
    between transaction data and aggregate revenues.
 3
    Let's stop there. What's the basis for that opinion?
 4
                 The basis for that opinion is simply
 5
           Α.
 6
    looking at the analysis that I performed in my report.
    When I changed the variable to include returns, all of
    the correlations that Mr. Graham cites as being
 8
9
    significant disappears.
10
           Q.
                 But to be fair, Dr. Voetmann, you are
11
    testing something different than Mr. Graham tested,
12
    correct?
13
                  MR. SOMENSATTO: Objection to form.
14
           Α.
                  I'm not sure I follow the question.
15
                 Did Mr. Graham analyze abnormal returns
           0.
16
    at all in his analysis?
                 He did not. He did not connect the sales
17
           Α.
    data to price returns.
18
19
                 So when you are comparing your
20
    correlation results with his results, you are talking
21
    about two entirely different tests, correct?
22
                   MR. SOMENSATTO: Objection to form.
23
           Α.
                 The test is still a correlation test, but
24
    what's relevant here is to determine whether the sales
25
    data would guide an investor in making their buy and
```

1 sell decision and Mr. Graham has not connected that 2 analysis he performed to that decision. Is it your opinion that you have? 3 0. Α. 4 Yes. As you sit here today, do you --5 Q. 6 withdrawn. As you sit here today, would you like to 7 make any changes to your report? Α. 8 No. As you sit here today, would you make any 9 0. 10 corrections to your report? 11 It's possible that I would maybe phrase Α. 12 something differently, but I can't think of any corrections I would make as I sit here right now. 13 14 MR. KELLY: Let's break for a few 15 minutes. 16 THE VIDEOGRAPHER: We are now off the 17 record at 3:47 p.m., October 16, 2015. 18 (Recess taken.) 19 THE VIDEOGRAPHER: This is tape six of 20 the deposition of Dr. Torben Voetmann. We are 21 now on the record at 4:00 p.m., October 16, 22 2015. 23 Welcome back, Dr. Voetmann. I want to go 0. 24 back to a question I asked you a moment ago that 25 relates to paragraph 30 where in that paragraph you

state Mr. Graham's correlation analysis neither proves 1 2 a predictive relationship between transaction data and aggregate revenues, do you see that? 3 Α. 4 Yep. Dr. Voetmann, you testified earlier today 5 0. that Dr. Graham's correlation analysis did prove a 6 7 predictive relationship between the transaction data 8 and aggregate revenue; is that correct? 9 No, I'm not sure that's correctly stated. I did testify that he found a correlation between the 10 11 data. 12 Q. So let me ask you this, Dr. Voetmann, Mr. 13 Graham's correlation analysis does prove a correlation 14 between transaction data and aggregate revenues, 15 correct? For a large number of the companies that 16 Α. 17 he analyzed I think it was 132 out of 226. And you stated earlier today that that 18 Q. 19 was obvious to you, correct? 20 MR. SOMENSATTO: Objection to form, 21 mischaracterizing testimony. 22 Q. Let me rephrase. Dr. Voetmann, you 23 testified earlier today that it was obvious to you 24 that there was a correlation between the transaction 25 data and the company aggregate revenues, correct?

MR. SOMENSATTO: Objection to form. 1 2 Α. For Graham's historical analysis, 3 historical data, I have no reason to disagree with the correlation he found. 4 So what's the distinction in your mind 5 0. between a correlation and -- withdrawn. Dr. Voetmann, 6 what's the distinction you are drawing between whether variable is correlated with another variable and 8 9 whether one variable is predictive of that variable? 10 Α. So either way as I responded to Graham's analysis he was looking at the predictability of the 11 12 aggregate data based on the correlation. I'm not sure 13 -- my opinion just having a correlation is not necessarily confirmative of a predictive relationship. 14 15 There may be other factors that could influence that predictability. 16 If one variable has a correlation of one 17 0. with another variable, what does that mean? 18 19 As a matter of principal it's perfectly Α. correlated. 20 21 0. What does it mean for one perfectly 22 correlated variable with another variable? 23 I'm trying to think about a classic Α. 24 statistical example we often find and I believe it's 25 the consumption of apple juice and murder is perfectly

1 correlated. Does that mean drinking more apple juice 2 suggests a higher rate of murder, I don't believe so so one has to be very careful when drawing conclusions 3 when you see a correlation of one that that's the same 4 5 as predictive. If something has a perfect correlation 6 0. 7 and there are two variables and they have a perfect 8 correlation of one and I tell you this is the number 9 for one of those variables, can you determine what the other variable's value is? 10 11 MR. SOMENSATTO: Objection to form. Is 12 that the question? 13 MR. KELLY: Yes. 14 Α. No. 15 Why not? Q. 16 Α. I think my example illustrated it. 17 because you know that relationship, doesn't necessarily imply that you can tell how one will 18 19 change. 20 Q. What do you mean by how one would change? 21 The change or predictive relationship. I Α. 22 don't think that's a fair characterization. 23 Is that because -- withdrawn. 0. Is your 24 answer assuming that the correlation between the two 25 variables will change over time?

It's possible it might change over time, 1 Α. 2 but one might also want to establish whether there are other factors that would influence that correlation. 3 Typical correlation analysis is between 4 0. 5 one variable and another, correct? MR. SOMENSATTO: Objection to form. 6 7 Α. Very high level principal, yes, that's 8 the typical definition of a correlation analysis. 9 All you're concerned about is how one 0. variable interacts with another variable, correct? 10 11 Α. No, I would disagree with that. If you 12 were a statistician, you would be concerned about the 13 causation as well and explaining whether in fact you found a true correlation or whether just a spurious 14 15 correlation. Please look at paragraph 32, subparagraph 16 0. 17 You state that Mr. Graham's regression analysis does not account for any time or fixed effects. 18 19 What's the basis -- withdrawn. You say it is standard in the literature to include these effects when 20 21 investigating -- let me just start again. 22 In paragraph 31B of your report, Dr. 23 Voetmann, you state that it is standard in the 24 literature to include time or fixed effects when 25 investigating impact of information; is that correct?

```
Α.
1
                  Correct.
                  What's the basis for that statement?
 2
           0.
                  The basis I cite -- one of the basis for
 3
           Α.
    that is in footnote 20.
 4
 5
                   MR. KELLY: Exhibit 9. Hold on a second.
                   (Exhibit 9, Article entitled The Impact
 6
 7
           of Analysts' Forecast Errors and Forecast
 8
           Revisions on Stock Prices, marked for
9
            Identification.)
10
           0.
                  Why don't you put that one to the side
11
    for a minute.
12
           Α.
                  Okay.
13
                   MR. KELLY: Exhibit 10.
14
                   (Exhibit 10, Article entitled The Impact
15
           of Analysts' Forecast Errors and Forecast
           Revisions on Stock Prices, marked for
16
           Identification.)
17
                  Dr. Voetmann, could you please identify
18
           Q.
19
    this document?
20
           Α.
                  This is the article by Beaver, et al.
    from 2008.
21
22
           Q.
                  Dr. Voetmann, is this the article that
23
    you cite in support of your statement?
24
                  I believe it is.
           Α.
25
            Q.
                  Let me get it out.
```

Α. 1 Sorry. 2 0. I was finding it. Dr. Voetmann, is this 3 the article that you cite in support of your statement that it's industry standard to include time or fixed 4 5 effects in regression analyses? 6 I didn't say industry standard, but it's Α. 7 standard in the literature, yes. Standard in the literature, correct? 8 0. 9 Α. Yes. Could you please identify where in that 10 0. article it states that it's standard in the literature 11 to account for time or fixed effects? 12 13 If you go to page 719, there is a Α. Sure. section subsection 2ii, incorporate of year and 14 industry fixed effects. Fixed effects are included to 15 16 capture sources of time dependent and cross sectional 17 dependency, so on and so forth. Does this article state that it's 18 0. 19 standard in literature to use time and fixed effects? It's an illustration of an article that 20 Α. 21 implements the time and fixed effects and recommends 22 doing so. 23 Could you please identify the 0. 24 recommendation? 25 Simply by stating that -- the paper Α.

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1
    itself doesn't state that it's industry standard,
 2
    sorry, standard in the literature. It's employing and
    citing other papers, but it's employing the
 3
    methodology of fixed firm effects and I included this
 4
 5
    paper as an illustration of a study similar to the
    study that Graham had undertaken at looking at
 6
    surprises, analyst forecasts where in fact they
    included fixed firm effect.
 8
9
                  In addition, the paper also spends a fair
    amount of discussion throughout where it tries to
10
11
    demonstrate the importance of controlling, for
12
    example, of the quarter year end as an illustration
    of a fixed effect.
13
                 Dr. Voetmann, could you have run Mr.
14
           0.
15
    Graham's regression analysis and accounted for time
    and fixed effects?
16
17
           Α.
                 Yes.
18
           Q.
                 Did you?
19
                 Did I run Graham's specification with
           Α.
    time and fixed effects?
20
21
           0.
                 Correct.
22
           Α.
                  I don't recall that I did. I ran my own
    regression with time and fixed effects. It made no
23
24
    difference on the conclusion of opinions of my
25
    analysis.
```

1 Why didn't you perform Mr. Graham's 0. 2 regression analysis with time and fixed effects? As I said, I don't recall if I did. 3 would have to go back and check. 4 If Mr. Graham were to account for time 5 0. and fixed effects and if the results were 6 7 substantially similar, would you have more confidence in the accuracy of his regression results? 8 9 Α. No. 10 0. Why not? 11 Again, I'm not challenging the regression Α. 12 itself, but I'm challenging the specification that he's not answering the question he set out to answer 13 by regressing revenues against revenues. 14 15 Dr. Voetmann, in any of your articles or 0. 16 publications have you done regression analyses without accounting for time or fixed effects? 17 In some of my earlier publications I 18 Α. 19 have. 20 0. How many instances have you run 21 regression analyses without accounting for time or fixed effects? 22 I don't think it's uncommon to run a 23 Α. 24 regression without time and fixed effects, however, if 25 you are looking at a time period where there is a lot

of uncertainty in the market, it would not be unreasonable to expect that you would control to see if some periods of your analysis is influenced more than others.

- Q. In those articles where you ran regression analyses without accounting for time or fixed effects, did you need to retract to those articles in any way? Retract them or modify the results from those regression analyses?
- A. No and also a number of the studies I did early on was focused on a very narrow time period. For example, when I did my study on CEO turnover, there was a very narrow time period so that's a good example of specification where time effects and fixed effects for time would not make much of a difference.
- Q. If you look at 31C in your report, Dr. Voetmann, if you look at paragraph 31C in your report, you critique Mr. Graham's regression analysis because it doesn't control for any market, industry or company specific factors, do you see that?
 - A. Other than revenue, yes.
- Q. Is it standard in the literature to control for market, industry or company specific factors when you do a regression analysis?

MR. SOMENSATTO: Objection to form.

Α. 1 Yes. 2 0. What's the basis for that opinion? It's articles I've read controls for 3 Α. market in the industry and company specific 4 5 information. There isn't such an article cited in 6 0. 7 connection with paragraph 31C. Could you please 8 identify what article or articles you are talking 9 about? Α. 10 There are so many articles I cannot tell 11 you which one would stand out among the many articles 12 that controls for market in the industry company 13 specific information. If Mr. Graham were to control for market, 14 0. 15 industry or company specific factors and if his 16 results were substantially similar, would you have 17 more confidence in the accuracy of his regression results? 18 19 I would have to review his new study and determine based on what factors he included whether I 20 had more confidence in that. 21 22 Q. If you turn to paragraph 33 you discuss Mr. Graham's use of the data in the DONE files. Look 23 24 at 33A. You note that in several of the DONE files 25 the historical revenues data provided for a given

1 company did not match the actual reported revenues, do 2 you see that? Α. 3 Yes. Had Mr. Graham solely used actual 4 0. 5 reported revenues for purposes of his regression analysis, would that fact eliminate the issue you 6 identified in 33A and 33B of your report? Could you read that question back. Α. 9 (Record read.) I'm not sure I understand the question. 10 Α. 11 0. The question is you're stating in 12 paragraph 33A and B that historic revenue data in the 13 DONE files are inaccurate, correct? 14 Α. Yes. 15 Assume Mr. Graham did not use that 0. information in his analysis and he used publicly 16 17 available actual revenue information. Do your critiques in 33A and 33B disappear? 18 19 So I think my critique is directed in a 20 different direction. As I understand it, Mr. Graham 21 did not use the reported aggregate sales data in DONE 22 files for his regression analysis, he pulled in the 23 reported revenue data for each company from Compustat 24 so what I'm addressing here is the simple fact that if 25 you want to understand the potential benefit that

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1
    defendants had by having access to the transaction
 2
    data from Capital One, I would want to pause and try
    to understand how are they using that transaction data
 3
    when in fact a large portion of these files that they
 4
 5
    supposedly relied on to come up with the estimates had
    the wrong information in it so this is not so much --
 6
    it's more critique of it might have been worth
 8
    understanding what the implication of using wrong
    information in these files would have on the estimate
9
    that defendants came up with.
10
11
                  In forming your opinions, would you like
           0.
12
    to know what defendants actually did with the data
13
    that they had access to?
14
           Α.
                  Sorry?
15
                   (Record read.)
                 Well, I would like to know what they
16
           Α.
17
    actually did. I don't know that I know what they
    actually did with the data.
18
19
                 You have been engaged by defendants in
           Ο.
20
    this matter, correct?
21
           Α.
                 Correct.
22
           Q.
                 Have you asked either the defendants what
23
    they did with the data?
24
                  I have not.
           Α.
25
           Q.
                  Why not?
```

1 Α. I have not had any access or opportunity 2 to speak to defendants. I'm looking at Graham's analysis to examine exactly what he did to see whether 3 he did the job to understand what was in these files 4 so he could draw a conclusion or base his opinion on 5 whether or not an investor would be able to make a buy 6 or sell decision based on the data contained in the DONE files and as I see these DONE files, I'm not sure 8 I exactly understand how they use that information to 9 make any trading decision. 10 11 Dr. Voetmann, are you aware of the fact 0. that defendants in this case have asserted their Fifth 12 13 Amendment rights against self incrimination and refuse 14 to respond to the vast amount of the discovery served? 15 Α. I understand. 16 0. Dr. Voetmann, is that the reason why you 17 don't have any information as to what exactly defendants did with the data? 18 19 MR. SOMENSATTO: Objection to form. 20 Α. I'm actually not sure. That's possibly a 21 reason why. 22 Q. So if you look at paragraph 33C, Dr. 23 Voetmann, you state that the reported composite 24 capture rate as reported in defendants' revenues 25 forecasts for a given quarter do not reconcile with

1 Mr. Graham's calculations, do you see that? 2 Α. Yes. Does Mr. Graham rely on defendants' 3 0. forecast in any way for his regression analysis? 4 No and that's partly surprising to me 5 Α. that he didn't. 6 Given that Mr. Graham is not relying on 0. 8 the composite capture rate in the DONE files, does 9 your concern as set forth in 33C disappear? Again, what I've discovered in these 10 Α. No. 11 DONE files is that at times the composite capture rate 12 is wrong so it leads me to the question what exactly 13 did the defendants use this data for. How would they 14 be able to predict revenues if they didn't have the 15 following their own methodology the right composite 16 rate and I have not seen any evidence that Graham looked into what that information -- how that 17 information could be used to make a decision to either 18 19 buy or sell a security. As you sit here today, what could you 20 Q. 21 tell me about what defendants did in analyzing the 22 Capital One transaction data and making their investment decisions? 23 24 MR. SOMENSATTO: Objection to form. 25 Α. The only -- what I can say is my analysis

1 of the transaction data that they had access to, that 2 information in isolation does not explain price movements so in other words there's no statistically 3 related relationship between the information they had 4 access to and stock price movements so it's not clear 5 to me how they would have used this information to 6 actually make any buy and sell decisions. In answering that question do you have 9 any first hand knowledge as to what exactly defendants did with the Capital One transaction data? 10 11 MR. SOMENSATTO: Objection to form. 12 Α. I don't have any first hand knowledge other than I have looked at hundreds of these DONE 13 14 files and seen how they compiled the DONE files. 15 Please turn to paragraph 35. Why don't 0. 16 you turn to Exhibit 15? We're probably going to flip 17 back between paragraph 35 and Exhibit 15? Okay. 18 Α. 19 What does Exhibit 15 reflect? 0. 20 Α. So Exhibit 15 was an attempt to show how 21 one might understand the use of the defendants'

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million, the consensus estimate was 133-and-a-half million so in other words the defendants' estimate of actual sales for BeBe is eight-and-a-half million less than what the consensus was.

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Based on that information alone prior to an earnings announcement you might imply that this company if you believe that defendants' forecast is more correct you would sell that stock. When you look at the earnings announcement and you see actual earnings comes out, it comes out at 135 and some; actually an actual earnings of revenue that was greater than the analyst forecast and so this is a good example just one example where the defendants' forecast might have driven them to sell this stock, but in reality the true revenue for that quarter for BeBe was actually higher than analyst expectation so if you believe in an earnings response approach, this is a positive response. You would expect the positive price impact and when you look at the return that day, you actually see a positive price impact so this calendar goes just in the opposite direction of what defendant might have done if they followed their own strategy of looking at their own forecast as opposed to the analyst consensus forecast.

Q. Did you or did someone else pick BeBe to

use as an example in this exhibit?

- A. I picked BeBe based on looking at Exhibit E of Mr. Graham just to pull an example where he predicted so the numbers you see here, the 8.5 million, I pulled that out of Mr. Graham's Exhibit E just to demonstrate. Now my cross sectional analysis where I examined almost a thousand of these similar transaction earnings announcements you confirm that the information of defendants' forecast doesn't predict the price return so in other words there's no statistical relationship between the transaction data and the price return.
- Q. Does Mr. Graham conclude that there is a statistically significant relationship between the BeBe Capital One transaction data and actual not yet reported revenues?
- A. Mr. Graham in his Exhibit E have a chart that confirms that the actual sales based on his analysis predicted Capital One transaction is lower than the actual sales. What Graham didn't do on this Exhibit E is just adding the consensus estimate so he's not drawing any conclusions one way or the other how the predictive is relevant for the actual here and he's not drawing any conclusion how it connects to whether an investor would buy or sell based on the

1 predictive sales of BeBe on his Exhibit E. 2 Let's look at your Exhibit 6 for So if you look at Graham correlations 3 4 revenues to Cap One transaction amount, do you see 5 that column? Α. 6 Yes. 7 0. And you see there is a star under most of 8 those and its says indicates statistical significance 9 of correlations at the five percent level, do you see 10 that? 11 Yes. Α. 12 0. If you look at your Exhibit 6 which is 13 the comparison of the correlations that Mr. Graham set 14 forth in his report, is it fair to say that the only 15 company that Mr. Graham -- withdrawn. Is it fair to 16 say the only company that Mr. Graham includes in his 17 analysis -- withdrawn. 18 I need to get a little more precise on 19 what this is. Dr. Voetmann, is it fair to say that 20 the only company that Mr. Graham includes in his Exhibit E charts for 20 DONE files that's not 21 22 statistically significant is BeBe?

A. If you look at Exhibit E of his report, I'm not sure that's a fair characterization. He estimates two correlation co-efficients, one of .43

23

24

and one of .88. I suspect I don't have the data in front of me, but the .88 is probably statistically significant.

- Q. Let's look at your Exhibit 6 when you say revenues to Cap One transaction amount and you have a star with respect to every single company except BeBe?
 - A. Yes.

- O. What does that star mean?
- A. It's referring to his Exhibit B where he concludes that there is no significant correlation on his Exhibit B for BeBe, however, when you look at his Exhibit E, you notice he actually does two calculations and it's not clear to me whether he's reporting one or the other and I don't think it distracts from the point that I'm making in my Exhibit 15 which is looking at a quarter and you are trying to assess whether could regardless of the correlations could defendant have traded on this information or make an informative decision on this information and as I demonstrate in Exhibit 15 it's not clear that they could have.
- Q. I'm a little confused, Dr. Voetmann. My understanding is that Mr. Graham is not offering an opinion that there is a statistically significant correlation between the Capital One transaction data

1 and the not yet reported company revenue for BeBe 2 stores. Are you saying that that is incorrect and in fact you think there is a statistically significant 3 correlation for BeBe stores? 4 5 Α. I'm saying I'm not sure. I haven't seen -- I don't recall seeing any evidence of the 6 7 significant level if he excluded the first two 8 quarters as he did in Exhibit E because if you look at 9 Exhibit F of his analysis, you can see he lists out 132 companies with statistically significant 10 correlations and the cut off for a correlation to be 11 12 significant is like .55 which would be somewhat lower 13 than point .88 for BeBe and it's too small for me to 14 read if BeBe is actually on here. I suspect it's not 15 because he included the first two quarters of BeBe, 16 but he does report on Exhibit E a correlation of .88 17 which based on his Exhibit F would suggest BeBe might in fact be statistically significant. 18 19 Dr. Voetmann, did you perform any Ο. 20 analyses as set forth in Exhibit 15 with respect to 21 any other companies that were set forth in Exhibit E 22 of Mr. Graham's report? I believe I did. 23 Α. 24 Q. What were the results of those analyses? 25 Α. At a conceptual level these results I

1 explain in Exhibit 16 and 17 where when you look at it 2 as a cross section across all the earnings announcements similar to one announcement that I 3 present in Exhibit 15, you find that the incremental 4 5 value of the transaction data is not material. 6 Let's go back to why exactly did you pick 0. 7 BeBe to do your analysis for Exhibit 15? I don't recall exactly. I was looking at 8 9 the 20 companies and I settled on BeBe. I believe I could have settled on other companies as well. 10 11 0. Do you think that -- withdrawn. Looking 12 at Mr. Graham's analysis of BeBe stores in Exhibit E, 13 do you believe that given the fact that excluding the 14 first two quarters that the correlation of Capital One 15 transaction data to sales as reported by the company 16 is .88, that that information for BeBe is sufficiently 17 correlated with not yet reported revenue information, 18 that using BeBe as an example in your 15 doesn't skew 19 your results? MR. SOMENSATTO: Objection to form. 20 21 Α. There was something in that question that 22 I've not yet reported revenue sales is confusing. The 23 correlations are based on reported revenues and the 24 transaction data.

25

Q.

Correct.

Α. But the answer is I don't think that 1 2 would not skew my point of Exhibit 15. Why don't you focus on paragraph 38. 3 relates to Exhibit 16, but I'm not going to have us go 4 5 back to that exhibit specifically. The question is 6 you say you substitute out Mr. Graham's growth in transactions data variable for the yearly change in the defendants' revenues forecast based on the 8 9 transaction data, do you see that? 10 Α. Yes. 11 In making that change, would you have any 0. 12 expectation that the defendants' revenue forecast 13 variable would have any impact on the abnormal returns of a given stock? 14 15 That's the question I'm trying to answer. Α. Since this is non public, I want to see if that 16 17 information have any explanatory power of the abnormal 18 return. 19 Dr. Voetmann, in your regression analyses Ο. 20 as set forth in Exhibits 16 and 17, do you use actual sales numbers? 21 22 Α. I use actual sales numbers as similar to 23 Graham for the consensus surprise. 24 Could you just identify where it is that 0. 25 you use actual sales numbers of the company?

1 Α. Exhibit 16, analyst expectation defined 2 as analyst revenue forecast or reported sales or 3 actual sales. Q. That's item B? 4 That's item B. 5 Α. But that's revenue forecast for a current 6 0. 7 time period, current quarter with reported sales for 8 prior year's quarter, correct? 9 Α. Correct. 10 Q. Do you use reported sales for the actual 11 reported sales for that quarter? 12 Α. No. 13 0. Why not? Because I'm trying to answer the question 14 Α. when that information -- could I trade on that 15 information prior to the release of the actual sales. 16 17 Could I by having access to the transaction data, could I determine that that information would put me 18 19 in a position to make a decision about buying or 20 selling a security and so by including the actual 21 sales, I'm not really testing the question of whether I can connect the transaction data to the actual 22 23 advantage that defendants might have had by having 24 access to that information. 25 Dr. Voetmann, if you want to include a Q.

1 true revenue surprise independent variable, you would 2 include both an analyst revenue forecast for a given quarter as well as and compared with the reported 3 sales for that quarter, correct? 4 5 Α. Correct. You don't do that here, correct? 6 7 I considered that as I was thinking about Α. 8 how to analyze this question, but I come to the 9 conclusion and realization if you are doing that you are testing the -- you are measuring instead the 10 surprise of actual versus consensus. You are not 11 12 measuring the impact or the potential impact of the 13 transaction data. You are doing an ex-post evaluation 14 of the surprise as opposed to testing the information 15 content from the transaction data. Does Mr. Graham use actual sales data as 16 0. 17 reported by a company in that quarter? 18 Α. Yes. 19 Dr. Voetmann, in your regression Ο. 20 analyses, do you account for time and fixed effects? 21 MR. SOMENSATTO: Objection, asked and 22 answered. I ran a model where I included time and 23 Α. 24 fixed effects, but I didn't report that here and it 25 didn't make an impact on the co-efficient of the

1 analysis. 2 0. When did you run that analysis? Same time I ran and prepared this 3 Α. exhibit. 4 5 Why did you decide to use the regression Q. analysis that did not include the time and fixed 6 7 effects? I was addressing directly what Mr. Graham 8 9 had done so by replicating his analysis and including the transaction data it was similar or easier or --10 11 easier to do a comparison to his results so I didn't see a need to include the co-efficients on the 12 13 effects. 14 0. In your regression analysis, did you 15 control for market industry or company specific 16 factors? 17 Α. Yes. Is your analysis set forth in this report 18 Q. 19 reflective of that control for market industry or company specific factors? 20 21 Α. Yes. 22 Q. Dr. Voetmann, what were defendants' 23 trading profits from January 2012 to December 2014? 24 MR. SOMENSATTO: Objection to form. 25 I don't recall the exact number. Α.

Graham's report how much they -- I understand he did an analysis of how much they invested and how much the account had at the end of a three year period.

- Q. Did you separately calculate defendants' profits from the time period January 2012 to December 2014?
 - A. I did not.

- Q. Why not?
- A. I was asked to examine the Graham report and the Cain report for the methodology they used to calculate the profit and then determine whether I agreed with those methodologies, but I didn't undertake for a couple of reasons undertake the same analysis. It wasn't clear to me I had access to all the information I needed for that in the files that were produced to me and two, based on my analysis that the transaction data that the defendants had access to since it's not statistically significant related to the returns, it's not clear to me that those are the factors or that's a factor that they put weight on when they made their trading decisions.
- Q. Dr. Voetmann, did Mr. Graham make any mathematical errors in calculating defendants' rates of returns?
- A. I have not verified his computation of

the account statements of the rate of return so I have no reason to believe one way or the other whether it's correct or not.

- Q. Please look at paragraph 40. You state Mr. Graham concludes that since each defendant's initial balance grew dramatically during this time period, yielding returns that were hundreds of times greater than corresponding returns on the market and industry index as well as far greater than the corresponding returns of top performing hedge funds, the defendants' investment returns were extraordinary; do you see that?
 - A. Yes.

- Q. Dr. Voetmann, do you agree or disagree each defendant's initial balance grew dramatically during the time period?
- A. So I have not done any analysis of the transaction or account statements. What I understand from the analysis that Graham has done and Cain, the account balances were somewhere between 11,000 and it grew to a few million dollars. I have done no analysis to determine what was their contributions and withdrawals during that time period or when and how much they invested around different earnings announcements.

As you sit here today, you don't have an 1 0. 2 opinion that refutes or conclusion that refutes that the defendant's initial balances grew dramatically 3 during the January 2012 to December 2014 time period, 4 5 do you? I have no reason to not believe that the 6 Α. 7 account statement reflected in the beginning of the investment and at the end of the investment were 8 9 incorrect. 10 0. You state yielding returns that were hundreds of times greater than corresponding returns 11 12 on the market and industry index as well. Are you 13 talking about the three year return rate or the annual 14 return rate? 15 Α. I was comparing the -- you can look at Graham's last exhibit where he compares the different 16 17 benchmarks return each year and two year period against the return defendants earned. 18 19 Dr. Voetmann, you don't dispute that Ο. 20 defendants' returns annually were hundreds of times 21 greater than the corresponding returns on the market 22 and industry indices, do you? 23 MR. SOMENSATTO: Objection to form. 24 MR. INGOGLIA: We have a continuing 25 objection that since he said he did no analysis

on this, you can ask a lot of questions of the 1 2 analysis he said he didn't do, but we don't 3 think those are meaningful questions. 4 Α. Could you repeat the question? 5 MR. KELLY: Can you re-read it, please. (Record read.) 6 7 So I can see the calculation that Graham Α. 8 has done where he computes a four to 500 sum rate of 9 return per year and he's comparing that to different benchmark. I have done no analysis to confirm the 10 11 accuracy of those calculations by looking at any 12 account statements. 13 Dr. Voetmann, you don't dispute that the 0. defendants' returns were far greater than the 14 15 corresponding returns of top performing hedge funds 16 from January 2012 to December 2014, correct? 17 MR. SOMENSATTO: Same objection as last time as Mr. Ingoglia. 18 19 I don't dispute -- I can compare the 20 Exhibit G of Graham where he lists the hedge funds 21 return year by year over a three year period and he's 22 comparing that to the return earned by the defendants. 23 I have problems with the way he alleged that 24 defendants' return unnecessarily entirely connected to 25 the benefit of the transaction data so I'm not sure

1 it's a fair comparison to compare his funds to the defendants' returns. 2 Dr. Voetmann, do you have an opinion one 3 0. way or the other as to whether defendants' investment 4 returns were extraordinary? 5 MR. SOMENSATTO: Objection to form and 6 basis. There is not enough information to answer 8 Α. 9 that question whether or not the defendants' earned those returns and how they earned those returns so I 10 11 can't tell you whether someone else were in a position like them to trade on the information available around 12 13 earnings announcement would have led to a similar return that they earned. 14 15 In your professional experience, what's a 0. 16 typical annual return earned by an investor? 17 MR. SOMENSATTO: Objection, scope. 18 Α. Of course it's a question that very much 19 depends on each investor's risk tolerance. 20 Q. Dr. Voetmann, do you have an opinion 21 whether or not a 100 percent annual investment return 22 is a good return? 23 MR. SOMENSATTO: Objection to form, scope 24 of the deposition. 25 If you are asking me if I would like to Α.

1 have 100 percent return, sure, I would not say no 2 thank you to that. How many people from your experience are 3 able to consistently get 100 percent annual returns 4 year after year? 5 MR. SOMENSATTO: Objection, same basis as 6 before. 7 Of 100 percent, I would suspect it's very 8 9 I'm looking at Exhibit H of Graham where he's plotting historical returns and there is certainly a 10 11 number of hedge funds that consistently earn that type 12 of return. 13 Are you at all curious as to how 0. defendants were able to gain the returns that they 14 15 were in the time frame January 2012 to December 2014? MR. SOMENSATTO: Same continuing 16 17 objection and to the form of the question. If you are asking me as someone who 18 Α. 19 teaches investment and finance, I'm very curious about 20 what additional factors they have considered when they 21 make their decisions to trade around earnings 22 announcements. It's not clear to me based on my 23 review of Graham's analysis and my analysis that the 24 additional information from the sales data of Capital 25 One was the only information they would have

1 considered so I would definitely like to know what 2 additional factors did they consider when they make their investment decisions. 3 Dr. Voetmann, just to be clear, you don't 4 Q. know whether or not they considered additional 5 factors, correct? 6 The only document I did read was the Α. 8 interrogatory where it seems to suggest that they 9 considered a host of factors, but I'm not -- I have no information to tell me what exact factors they 10 11 considered. 12 0. Which interrogatory are you referring to? 13 I believe I read both of Bon Huang and Α. Nan and I believe they both answered to the extent 14 15 that they gave an answer that they looked at a lot of factors, but I could have read that incorrect, but I 16 believe that's true. 17 If you look at paragraph 41 you state 18 0. 19 that Mr. Graham's calculations of returns are presented on an ex-post basis? 20 21 Α. Yes. 22 Q. Please explain what you mean by that? 23 What I mean it's simply measuring the Α. 24 money that was deposited into the account and

presumably invested into different securities and then

quarter end or year end report on what the balances was of those account statements.

Q. That's how you typically calculate someone's trading profits, correct?

A. Well, I think there are two elements.

One, are we talking about the trading profit that they earned based on having had access to transaction data or are we talking about trading profit they earned through investments where the company either rose or fell based on other factors, other information than the transaction data.

I don't disagree that typically you report the balance of your investments at the end of the year in a yearly statement or a quarterly statement.

- Q. So if you were to perform this ex-post -- withdrawn. If you were to perform the analysis you propose in paragraph 41, how would you do it?
- A. Well, if I were to examine what was the trading profit from the defendants, first I would have to understand what factors they considered when they made their decision to buy and sell and based on those factors determine whether they made a decision to trade based on the transaction data from Capital One. If the circumstances where they made a decision to

1 trade, but there was no weight placed on the Capital 2 One data, but it was put more weight on some other factor, I'm not sure I would include that trading 3 profit in my analysis. What profit came from or could 4 5 potentially be related to the non public information. 6 Dr. Voetmann, are you aware of the fact 0. 7 that in the Commission's interrogatories the 8 Commission asked defendants what factors they 9 considered when making their investment decisions and the response that we were given was that the 10 11 defendants were asserting their Fifth Amendment rights again self incrimination? 12 13 MR. SOMENSATTO: Objection to form. 14 Α. Yes. 15 So the Commission asked the defendants 0. 16 for the information set forth in your prior response 17 which was what did you consider in making your investment decisions and you understand the Commission 18 19 was denied discovery to that question, correct? 20 MR. SOMENSATTO: Objection to form. 21 Α. I may have misread the interrogatory that 22 the question was about a host of factors, but it comes 23 to mind that the only place I saw some information I 24 had access to from them was in those documents so I 25 may have read them incorrectly. I'm not sure as I sit

1 here. 2 Q. Dr. Voetmann, are you aware of the fact that Mr. Graham doesn't have access to the information 3 that he would need to, namely information from 4 5 defendants as to why they made their investment 6 decisions in order to perform the analysis that you propose in your paragraph 41? I don't know that that necessarily is 8 9 If we take one company Walmart and they invested in Walmart, it's possible that you could, 10 it's not an analysis I have undertaken, but you could 11 12 look at was there any other announcements on the news 13 that came out about Walmart post their investment that either increased the value of Walmart or decreased the 14 15 value of Walmart and those factors was in fact what 16 drove the account balances up as opposed to the 17 information that they had -- the non public information they had access to. 18 19 If you look at paragraph 42 of your 20 report, you observe that Mr. Graham did not factor in 21 any post announcement returns earned by defendants in 22 calculating their investment returns; do you see that? 23 Α. Yes. 24 Did you calculate whether defendants had 0. 25 any post announcement returns?

I did not undertake any analysis to 1 Α. 2 quantify the return that was specifically related to 3 if any the information advantage that they might have had. 4 As you sit here today, can you identify 5 0. 6 any returns that were earned post announcement by defendants? Α. I cannot point to any specific company 9 and what return that might be. I'm posing it more as if I were to actually truly measure what return they 10 earned based on the information, at least I would 11 12 undertake a study to examine whether or not there was 13 returns earned that was completely unrelated to the transaction data and I have not seen Mr. Graham 14 15 undertake such analysis. On average how long were defendants' 16 0. 17 positions opened? It's my understanding from in particular 18 Α. 19 Dr. Cain's analysis it was a short window, but it 20 could also go up to months. 21 What percentage of the defendants' 0. 22 returns were held for one day or less? 23 Again, if I recall Cain's analysis, it Α. 24 was a high percentage that was a very short window. 25 Do you have any further recollection as Q.

to what percentage that was?

- A. I have his report so I could look at it if you would like.
- Q. Does the fact that the vast majority of defendants' investments were held for a very short time frame mitigate against the concerns of any post announcement returns?

MR. SOMENSATTO: Objection to form.

- A. It might have some. You might believe it has some mitigating factor to the extent that when you hold it for a longer time period more information would be released by the company that might change the return on a given company nonetheless even in a short time window one could still examine whether there are other factors that drove the price in that short window as opposed to the transaction data and I didn't see neither Dr. Cain nor Mr. Graham undertake such analysis.
- Q. To follow up on that last point, you acknowledge in your report that Dr. Cain does in fact calculate the trading profits through the earnings announcement, correct?
- A. I believe he undertook the proper approach to measure the return. What he failed to do was to examine whether or not some of these returns

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1
    were caused by factors other than the transaction
 2
    information and this goes to my broader point about
    Dr. Cain, I don't have so much dispute with his
 3
    approach, but the fact that he examined only the
 4
 5
    companies that had a significant correlation, I would
    dispute that given that my analysis of the Graham
 6
    shows that there is no correlation when you measure it
 8
    based on returns so to that extent Dr. Graham may have
9
    undertaken a reasonable approach, but it's not of the
    right set of companies.
10
11
                  MR. SOMENSATTO: You said Dr. Graham.
12
           Α.
                 I should state that I said Dr. Graham,
    but I meant Dr. Cain.
13
                  MR. SOMENSATTO: You guys in a position
14
15
           to take a break?
                  MR. KELLY: What time is it now? Want to
16
           do three minutes?
17
                  THE VIDEOGRAPHER: We are off the record
18
19
           at 5:09 p.m., October 16, 2015.
20
                   (Recess taken.)
21
                  THE VIDEOGRAPHER: This is tape seven of
22
           the deposition of Dr. Torben Voetmann. We are
23
           on the record at 5:16 p.m.
24
                 Welcome back, Dr. Voetmann. Please look
           0.
25
    at paragraph 43 of your report. You state that
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1 comparing defendants' returns to those of hedge funds are like comparing apples to oranges; is that right? 2 3 Α. Yes. So can you please explain the basis for 4 0. 5 that opinion? 6 So the way I'm thinking of this is the Α. 7 basis of my opinion is in a hedge fund compared to 8 defendants where defendants are trading in as far as I 9 understand very small amounts, at the time sometimes thousands of dollars, it's a very different investment 10 11 view than we are dealing with a hedge fund where you 12 are talking about millions of dollars so when they are 13 making a decision, I think it's maybe fair to argue 14 it's more carefully considered -- it's a different 15 investment decision that's made at the hedge fund 16 level than when you are dealing with a defendant 17 that's trading \$2,000 or \$5,000 at a time. 18 Q. Dr. Voetmann, who would you expect to be 19 more profitable in their securities trading; 20 securities industry professionals who are paid to trade securities on behalf of their clients or 21 22 defendants in this action who are fraud analysts at a 23 credit card company? 24 MR. SOMENSATTO: Objection to form. 25 Α. Well, from an academic perspective you

might think you would argue the hedge fund managers who maybe have more training in picking investments.

On the other hand, it's not uncommon to see that there are certain number of individuals that are engaging in trading in rapid trading or frequent trading thus those individuals often out perform even seasoned investment professionals.

- Q. What are the reasons that the individuals out perform hedge funds?
- A. Again, I didn't do any specific analysis to confirm how these defendants traded other than looking at account statements, but reasons that you might out perform a hedge fund is your ability to take on greater risk so your capital at risk might be more willing to risk that than a hedge fund who has a much larger capital and it has investors in those funds that may not agree with taking on the same level of risk as an individual deciding to trade on their own account.
- Q. Did defendants engage in rapid trading tactics?
- A. I have not looked at any information or account statements to determine what frequency of trading they did.
 - Q. In paragraph 42 you state the defendants

1 allegedly used the transaction data to forecast 2 revenues and trade on stocks ahead of their actual revenues announcements, do you see that? 3 Yes, I see that. 4 Α. Do you believe that to be an accurate 5 0. 6 statement? MR. SOMENSATTO: Objection to form. MR. INGOGLIA: Do you mind reading that 8 9 statement. The defendants allegedly used the transaction data to forecast revenues and trade 10 11 on stocks ahead of their actual revenues 12 announcements, that's one? 13 MR. KELLY: Yes. MR. SOMENSATTO: Are you asking is the 14 15 allegation accurate or is the actual substance 16 of the allegation accurate? 17 MR. KELLY: I'm asking whether you believe that the allegation here is that the 18 19 defendants allegedly used transaction data to forecast revenues and trade on stocks ahead of 20 21 their actual revenues announcements. 22 Α. I have not undertaken any analysis of the 23 account statements to see if they line up with the 24 actual earnings announcements, but it's my 25 understanding that the DONE files was used to come up

1 with an estimate of forecasted revenues. 2 0. Let me ask you this, what securities were 3 defendants trading? MR. INGOGLIA: I have an objection which 4 is he said several times he's done zero 5 analysis and has not even looked at account 6 statements and this is about the twentieth 7 8 question about the trading activity. You have 9 45 minutes left. His answers are meaningless on that subject so that's my objection that 10 11 it's an improper question and there is 12 absolutely no foundation to get his answers on 13 any of the questions. 14 MR. KELLY: I'm asking about a statement 15 in his report. MR. INGOGLIA: Which is repeating the 16 17 report he read from your guy. MR. KELLY: Your objection is noted. 18 19 Could you re-read the question. Α. 20 (Record read.) 21 Α. I have not done any analysis to confirm 22 in the account statements since I have not looked at 23 them, but it's my understanding that Mr. Graham 24 identified 226 securities that he listed in the 25 Exhibit B.

Let me ask you this, Dr. Voetmann. 1 0. 2 defendants trading stocks or were they trading debt or were they trading options? 3 MR. INGOGLIA: Same objection. 4 I haven't looked at the account 5 Α. 6 statements so I can't confirm the different types of 7 securities that they traded. If you look at paragraph 44, you state 9 that Dr. Cain's analysis is based entirely on Mr. Graham's flawed premise that a correlation and thus 10 predictive relationship exists between the transaction 11 12 data and aggregate revenues, do you see that? 13 Α. Yes. 14 0. Where specifically in Dr. Cain's report 15 does he assume a correlation and predictive nature 16 between Capital One's transaction data and aggregate 17 revenues? Exhibit B. Sorry, Dr. Graham's Exhibit B 18 Α. 19 lists the securities and Dr. Cain analyzed those securities that was identified in Graham's Exhibit B. 20 21 Dr. Voetmann, are you just saying that --0. 22 withdrawn. Dr. Cain's analysis is simply a 23 mathematical summing up of defendants' gains from a certain set of securities, correct? 24 25 I've not confirmed that analysis, but Dr. Α.

1 Cain -- but in paragraph 12 of Dr. Cain he states that 2 he received a list of tainted stock symbols and company names from Steven Graham's as explained in the 3 Graham report. 4 Is your point in paragraph 44 simply that 5 Q. 6 you disagree that the companies listed in Exhibit B of 7 the Graham report should be considered tainted 8 companies? 9 MR. SOMENSATTO: Objection to form. 10 can answer. 11 Α. So in my opinion is that when I looked at 12 my analysis and corrected Graham's correlation 13 analysis, I found that instead of 132, only eight had a significant correlation so with that if Dr. Cain was 14 15 going to apply the same methodology but on the right set of companies, he should have analyzed those eight 16 companies. 17 But just to be clear, Dr. Cain was simply 18 Q. 19 doing the math he was asked to do, correct? 20 Α. I believe that's what he was asked to do, 21 correct. 22 Q. Your noted objection is that you disagree 23 that the list of securities that he did his analysis 24 over is the appropriate set of securities, correct? 25 Two things; the list of securities and Α.

1 two, I have not analyzed Dr. Cain's analysis by 2 replicating it to confirm whether he made any 3 computational errors in his calculation of the profit. So Dr. Voetmann, if you turn to paragraph 4 0. 5 45, you note that Dr. Cain uses the FIFO accounting method for his analysis, correct? 6 Α. Correct. You note that Dr. Cain could have used 0. 8 9 the LIFO method instead, correct? Correct. 10 Α. 11 You note that the PSLRA majority view is 0. that securities fraud losses should be calculated 12 13 using only the LIFO method, correct? Yes, I understand that. 14 Α. 15 0. So what's the PSLRA? The PSLRA is used in securities class 16 Α. actions to control for circumstances where a stock 17 price rebounds after a corrected disclosure so that 18 19 you can cap the out-of-pocket losses to investors in that class action. 20 What does the PSLRA stand for? 21 0. 22 Α. Private Securities Law. Now I'm blanking. Private Securities Law Reform Act I believe. 23 24 I think it's the Private Securities 0. 25 Litigation Reform Act?

Α. 1 You are right. 2 0. Let's focus on the first three words of that, private securities litigation. Is this case a 3 private securities litigation? 4 I don't believe so. 5 Α. The point of my 6 statement here in paragraph 45 is to demonstrate that Dr. Cain chose one accounting methodology for 8 measuring profit when there's other methodologies that 9 he could have examined and explored as well and at least compare to see if it would yield different 10 11 answers. This case also does not involve 12 0. securities fraud losses, correct? 13 14 Α. Correct. 15 Have you done a similar analysis to Dr. Q. 16 Cain's using the LIFO methodology? 17 Α. For this case I have not done any analysis to confirm or verify Dr. Cain's analysis. 18 19 So in your last sentence you say Dr. Ο. 20 Cain's use of the FIFO method may thus understate the 21 cost basis and overstate corresponding profits, do you 22 see that? 23 Yes. Α. 24 It's also true that Dr. Cain's use of 0. 25 FIFO may overstate the cost basis and understate

1 corresponding profits; is that correct? 2 I've not confirmed one or the other way. 3 I'm basing that statement on the traditional understanding of how a LIFO works compared to a FIFO. 4 Given the fact that the vast majority of 5 Q. 6 the trades were very short term, does that mitigate 7 the concern with using one method over another? MR. SOMENSATTO: Objection to form. 9 Α. I've not done the analysis so I can't 10 confirm one way or the other. 11 In the abstract if you are using a FIFO 0. 12 methodology versus a LIFO methodology over 13 transactions that are either a three year holding 14 period or a one day holding period, where would you 15 expect there to be greater differences in the results 16 of those two methods? 17 MR. SOMENSATTO: Objection to form. You would need more information than 18 Α. 19 If in your hypothetical you only hold the stock 20 you purchase and you had no other holdings in the 21 security and you sold it after a few days and now you 22 have no more of that security, if that's your 23 hypothetical, it's possible that the two methods would 24 yield very similar results. 25 Dr. Voetmann, can you please explain why Q.

in paragraph 46 you opine that Dr. Cain's methodology for computing ill-gotten gains is unfounded?

A. Again, it's unfounded because it's resting entirely on a fraud and an insufficient analysis that's produced a list of companies that when I corrected was not correlated. Second, he's calculating gains over a period of time, the holding period of the investments as I understand it, but again, he's not controlling for any potential confounding information or any information that might have driven the prices other than the transaction data.

Q. Let's shift to the next paragraph and that's paragraph 47 and that's actually the paragraph

that's paragraph 47 and that's actually the paragraph that has the term unfounded in it. Let me ask you about this one now. Why based on paragraph 47 do you claim Dr. Cain's analysis is completely unfounded?

MR. SOMENSATTO: Objection, asked and

 $\verb"answered".$

A. There is one more element, the third element. Dr. Cain and again, I have not verified or done the analysis, but he stated in his report that he offset losses against gains before he calculates the net profit, however, reading his report he also makes it clear that he only does a partial offset. If

there's a trading position that actually had an aggregate net loss, he excludes that from the trading profits so, in other words, he's only counting where there's a positive return.

- Q. Let me give you a hypothetical here. You understand that insider trading is a crime, correct?
 - A. I assume it is.

- Q. You understand that in this case there are lots of allegations that there were a number of trades that were illegal, correct?
- A. I've not done any analysis of any specific trades that were illegal. My analysis is entirely looking at the information that Mr. Graham put forward to verify whether he could prove any relationship between that information and price -- sorry, whether that information was material to an investor.
- Q. Let's just -- I understand that. Let's just assume for purposes of discussion then that this is the understanding that the Commission is alleging a number of instances of insider trading. This was not one trade. This was a number of instances over a long period of time in a number of different companies. With that let me go to a hypothetical here. Let's talk about another crime, right.

Let's say there were a team of bank robbers, right, and they had certain costs to go along with their illegal business in terms of getting guns, getting get away cars and what not and so ten banks they try to rob and they successfully rob eight of those banks and they get a million dollars each, but they are unsuccessful in robbing two banks and so they have net losses because of the money they put out fore man power and guns and get away vehicles.

Do you offer an opinion that those bank robbers if they are pursued for that money stolen that they should be able to deduct the costs associated with their unsuccessful robberies from the amount of money they actually stole from the banks?

MR. SOMENSATTO: Objection to form. He's asking are you offering that opinion.

- A. It's an interesting hypothetical. If I read Dr. Cain's report correctly, if there was a loss in one of the banks that they actually made away with a million, he would offset that loss and let them get away with that so he's partially correcting for a loss so if he's going to do it, he's either going to do it or he's not going to do it.
- Q. It seems like Dr. Cain is correcting for the loss the costs within a given bank job, but he's

1 not offsetting for the unsuccessful bank jobs; isn't 2 that correct? MR. SOMENSATTO: Objection to form. 3 I have not verified his analysis, but it 4 Α. 5 appears to me that if he's going to offer up some kind 6 of offset, partial offset, it would be prudent to calculate what the total true trading profit was for 8 the trading strategies that was implored. 9 Let me ask you this. Are you able to 0. offer an opinion legally as to whether or not an 10 11 individual who is successfully engaged in insider 12 trading in certain instances, but unsuccessfully 13 engaged in insider trading in other instances is able to offset the losses from the unsuccessful insider 14 15 trading with the gains from the successful insider 16 trading? 17 MR. SOMENSATTO: Objection. Are you asking if he can provide a legal opinion on 18 19 that? 20 MR. KELLY: Yes. 21 I'm not a lawyer so I don't think I can Α. 22 opine on that. MR. INGOGLIA: If the commission is now 23 24 taking the view that if you lose money on a 25 trade it's by definition not insider trading

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that's valuable information for us and for the
1
 2
           firm's clients generally. That would be a new
           position for the Commission to say that.
 3
                   MR. KELLY: Sorry, I missed what you
 4
           said.
 5
                   MR. AXELROD: I think we should let the
 6
           witness finish an answer.
 7
 8
                  I answered.
           Α.
9
                  Let me just modify that question with one
           0.
    thing. Are you able to offer any sort of opinion as to
10
11
    whether it's appropriate for unsuccessful insider
12
    trading losses to be offset against successful insider
    trading gains?
13
14
                   MR. SOMENSATTO: Objection to form.
15
                  I'm not offering that opinion.
           Α.
                   THE VIDEOGRAPHER: We are now off the
16
17
           record at 5:39 p.m., October 16, 2015.
                   (Recess taken.)
18
19
                   THE VIDEOGRAPHER: We are now on the
20
           record at 5:41 p.m., October 16, 2015.
21
                   MR. KELLY: Thank you, Dr. Voetmann. I
22
           have no more questions at this time.
23
                   THE WITNESS:
                                 Thank you.
24
    EXAMINATION BY
25
    MR. SOMENSATTO:
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1 Dr. Voetmann, a few questions on 0. 2 redirect. First, in Graham's analysis for how many 3 companies did he not find a correlation between the Capital One transaction data and the revenue data for 4 5 that company? I believe --6 Α. MR. KELLY: Objection to form. I believe he had identified in the 8 Α. 9 production of materials 226 companies or 212, something like that and he determined that there was a 10 11 significant correlation of 132. 12 0. Earlier in your deposition, do you recall 13 testimony you gave identifying the documents that you 14 relied on and looked at in this case? 15 Α. Yes. You didn't have access to the universe of 16 0. 17 documents that the SEC has not yet produced to the defendants; is that correct? 18 19 That's what I understand, yes. Α. 20 Q. So you didn't consider those documents in 21 your analysis, correct? 22 Α. I did not consider those documents. 23 You were asked about payment earlier in 0. 24 your deposition, do you recall? 25 MR. KELLY: Objection to form.

Α. 1 Yes. 2 Q. Have you submitted a bill in this case 3 yet? Not yet, but it's short coming. 4 Α. 5 0. Have you prepared a bill? At the end of the month I will have 6 Α. 7 prepared a bill. You were shown a publication, I believe 8 it was Exhibit 2 at the start of your deposition. I'm 9 looking for the publication. It's event study methods. 10 11 Α. Correct. 12 0. It's actually Exhibit 3. Had you read this article before today? 13 I can't recall I read it. I'm familiar 14 15 with the Securities Litigation Handbook, but I can't recall and if I had read it, it's a number of years 16 17 ago. Did you read that entire article before 18 Q. 19 providing your testimony today? MR. KELLY: Objection, asked and 20 21 answered. 22 Q. You can answer. 23 For this preparing today I did not read Α. 24 this particular article. 25 Let me clarify that. After it was entered Q.

1 as an exhibit today, did you read the entire article 2 or just a portion of the article? I only read a couple of sentences that 3 was pointed out to me. 4 If you were doing an analysis to 5 Q. determine whether particular information is material 6 7 in an insider trading case like this, what kinds of information would you review and assess? 8 9 MR. KELLY: Objection to form. Α. 10 I'm sorry, I have to have you read that 11 again. 12 (Record read.) 13 MR. KELLY: Same objection. 14 Α. Well, as a starting point I would look at 15 a number of factors that might help me understand how that information against the non public information 16 17 could be used, but as a starting point I would definitely do an analysis similar to what I performed 18 19 in my report where I would examine whether the incremental value of this non public information could 20 21 explain price movements, but there may be a host of 22 other factors that one would want to consider as well. How the defendant like in this case would use this 23 24 information and how in conjunction with what other 25 factors would they use this information.

1 0. When you say other factors, what other 2 factors publicly available to the market would you 3 look at? One factor I think is consensus 4 Α. 5 estimates, but if I'm looking to possibly trade around 6 an earnings announcement, I might have examined the company, the stock to determine whether there is some 8 events or some information that might be coming out as 9 well around that earnings announcement. Is the company engaging in any merge and acquisition deals or is the 10 company engaging in any other projects that would 11 12 improve their cash flows so I think there are a number 13 of different factors one might look at and then try to 14 parse out to see if the non public information 15 explains the stock price movement. 16 0. Did you look at any of the defendants' account statements in this case? 17 I did not. 18 Α. 19 When you were answering Mr. Kelly's 0. 20 questions about the defendants' trading activities, 21 was your factual understanding of that activity based 22 entirely on their experts' reports? 23 MR. KELLY: Objection to form, leading. 24 Q. You can answer. 25 Α. Yes.

1	Q. Did you read the Complaint in this case?							
2	A. I did.							
3	Q. Did you obtain an understanding of the							
4	allegations that the SEC is making in this case from							
5	that Complaint?							
6	A. I believe I did.							
7	MR. SOMENSATTO: I don't think we have							
8	anything else.							
9	MR. KELLY: I'm good. We're good.							
10	THE VIDEOGRAPHER: This concludes today's							
11	deposition of Dr. Torben Voetmann. We are now							
12	off the record at 5:48 p.m., October 16, 2015.							
13	(Time noted: 5:48 p.m.)							
14								
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19	TORBEN VOETMANN							
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CERTIFICATE
1
 2
 3
    STATE OF NEW YORK
 4
                        ) ss.:
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    COUNTY OF NEW YORK )
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 7
                  I, SHARI COHEN, a Notary Public within
8
    and for the State of New York, do hereby certify:
9
                  That TORBEN VOETMANN, the witness whose
    deposition is hereinbefore set forth, was duly sworn
10
11
    by me and that such deposition is a true record of the
12
    testimony given by such witness.
13
                  I further certify that I am not related
14
    to any of the parties to this action by blood or
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    marriage; and that I am in no way interested in the
16
    outcome of this matter.
17
                  IN WITNESS WHEREOF, I have hereunto set
    my hand this 19th day of October, 2015.
18
19
    Reading and Signing was:
    ___ requested ___ waived _X_ not requested
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    SHARI COHEN
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News Release

Cabela's Inc. Announces Earnings Date for Fourth Quarter and Full Fiscal Year 2013 Financial Results

SIDNEY, Neb.--(BUSINESS WIRE)--Jan. 15, 2014-- Cabela's Incorporated (NYSE:CAB) announced today it is scheduled to release fourth quarter and full fiscal year 2013 financial results before the market opens on Thursday, February 13, 2014. A conference call to discuss the results will be held at 11:00 a.m. ET that same morning. The call will be hosted by Tommy Millner, Cabela's Chief Executive Officer, and Ralph Castner, Cabela's Executive Vice President and Chief Financial Officer.

A webcast of the conference call can be accessed on the Investor Relations section of the Company's website at www.cabelas.com. To ensure access to the webcast, please visit the website at least 15 minutes prior to the call to register and download any necessary software. A replay of the webcast will be archived on the Company's website.

About Cabela's Incorporated

Cabela's Incorporated, headquartered in Sidney, Nebraska, is a leading specialty retailer, and the world's largest direct marketer, of hunting, fishing, camping and related outdoor merchandise. Since the Company's founding in 1961, Cabela's® has grown to become one of the most well-known outdoor recreation brands in the world, and has long been recognized as the World's Foremost Outfitter®. Through Cabela's growing number of retail stores and its well-established direct business, it offers a wide and distinctive selection of high-quality outdoor products at competitive prices while providing superior customer service. Cabela's also Issues the Cabela's CLUB® Visa credit card, which serves as its primary customer loyalty rewards program. Cabela's stock is traded on the New York Stock Exchange under the symbol "CAB".

Source: Cabela's Incorporated

Cabela's Incorporated Investors: Chris Gay, 308-255-2905 or Media: Joe Arterburn, 308-255-1204

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%coach%' and mrch_catg_cd = 5631} or mrch_nm like any ('%coh*%', 'COACH USA INC', 'COACH CANADA', 'PAYPAL *COACHSERVIC', 'PAYPAL *COACH INC')) then %apple%' and mrch_catg_cd in (5734,5735)) or (mrch_nm like any ('%apple%store%', '%apple%retail%') and mrch_catg_cd = 5732)) then 'AAP' when (mrch_nm SBU' when (mrch_nm like '%blue%nile%' and mrch_catg_cd in (5944, 5094)) then 'NIL' when ((mrch_nm like '%brio %' and mrch_catg_cd = 5812) or mrch_nm BRAVO%',"%CAF%',"%BISTRO%',"%PIZZ%',"%ROBERTO%',"%MEXIC%',"%SANDWICH%',"%ITALIAN%',"%EL%BRAVO%',"%BURRITO%',"%MFA%',"%BAKERY%',"%BAR%'," debit_cr_cd = 'D' THEN trxn_amt WHEN debit_cr_cd = 'C' THEN trxn_amt *(-1) END) as trxn_amt from pcdw.t2_postd_trxn a, pcdw.t2_acct_stat_hist_bc bwhere ike '%michael%kors%') then 'KOR' when ((mrch_nm like any ('%bebe.com%', '%bebe%store%', 'BEBE #270%') and mrch_catg_cd = 5621) or mrch_nm like any mrch_catg_cd <> 0) then 'CAB' when (mrch_nm like any ('%tractor%supply%', '%del%s%farm%') and mrch_catg_cd = 5599) then 'TSC' when ((mrch_nm like %manhattan%bagel%' or (mrch_nm like '%einstein%' and mrch_nm not like '%weinstein%' and mrch_catg_cd in (5812, 5814))) then 'BAG' when ((mrch_nm ("witamin%shoppe%', "%SUPER SUPPLEMENTS%')) then 'VSI' when (mrch_nm like '%big%5%spo%') then 'BGF' when (mrch_nm like '%STAR%BUCK%') then when (mrch_nm like '%bj%s%restaurant%' and mrch_catg_cd = 5812) then 'BJR' --when (mrch_nm like '%Harris%Teeter%') then 'HTS' when (mrch_nm like insert into kwo874_svm_agent_infosel case when (mrch_nm like '%CACHE%#%') then 'CAC' when (mrch_nm like '%cabela%' and %INC%',%FAMILY%',%rio bravo%') then 'BBR' when (mrch_nm like any ('%bww%', '%buffalo wild%wing%') and mrch_catg_cd in (5812, 5814)) then 'BWL' mrch_catg_cd in (7922, 7523, 7399, 5999, 5969, 5968, 5967, 5942, 5735, 5411, 5399, 4816)) then 'AMZ' end stk, trxn_dt, trxn_post_dt,SUM(CASE WHEN COH' when (mrch_nm like '%weight%watch%') then 'WTW' when (mrch_nm like '%body%central%' and mrch_catg_cd in (5621,5999,8999)) then 'BOD' when (mrch_nm like '%office%max%') then 'OMX' when (mrch_nm like '%select%comfort%' and mrch_catg_cd = 5712) then 'SCS' when ((mrch_nm like mrch_nm like any ("%cheesecake%gft%', "%grand%lux%gft%')) then 'CAK' when mrch_catg_cd = 3260 then 'SAV' when (mrch_nm like '%jet%blue%' and *ADVANCEAUTO') and mrch_catg_cd = 5533) then '1AA' when ((SUBSTR(mrch_id, 1, 6) IN ('672023','672350') AND mrch_catg_cd IN ('5611','5691')) OR ike any ('cheesecake%', '%grand%lux%', '%cheesecake f%ct%ry%') and mrch_catg_cd = 5812 and mrch_nm not like all ('%bistro%', '%cheesecakes%')) or trxn_post_dt between date - 3 and date - 1)and stk is not null AND tsys_tcat_class_cd = 'PR' and mrch_cntry_cd like 'US%'and a.acct_id = b.acct_id and mrch_catg_cd not in (0, 8999)) then 'JBL' when mrch_catg_cd in (3066, 3177) then 'LUV' when (mrch_nm like any ('%amazon%', '%kindle%') and mrch_nm LIKE ANY ("%ralph%lauren%', 'PAYPAL *RUGBY', 'RUGBY.COM', 'RUGBY STORE #424', 'RUGBY CAFE LLC')) then 'RL' when (mrch_nm like any ("PAYPAL *BEBE', '%2b%store%')) then 'BEB' when (mrch_nm like any ('%advance%auto%part%', '%advance%auto%#%', '%autopart intl%', 'PAYPAL = 'brio' or (mrch_nm like '%bravo %' and mrch_st_cd <> 'CA' and mrch_catg_cd = 5812)) and mrch_nm not like all ('%BRAVO b.acct_sfx_num = 0 and SVC_OWNR_CD NOT IN ('000086', '000087')group by 1,2,3; 2/7/2014 7:42:31 AM

%coach%' and mrch_catg_cd = 5631) or mrch_nm like any ('%coh*%', 'COACH USA INC', 'COACH CANADA', 'PAYPAL *COACHSERVIC', 'PAYPAL *COACH INC')) then %apple%' and mrch_catg_cd in (5734,5735)) or (mrch_nm like any ('%apple%store%', '%apple%retail%') and mrch_catg_cd = 5732)) then 'AAP' when (mrch_nm SBU' when (mrch_nm like '%blue%nile%' and mrch_catg_cd in (5944, 5094)) then 'NIL' when ((mrch_nm like '%brio %' and mrch_catg_cd = 5812) or mrch_nm BRAVO%','%CAF%','%BISTRO%','%PIZZ%','%ROBERTO%','%MEXIC%','%SANDWICH%','%ITALIAN%','%EL%BRAVO%','%BURRITO%','%MFA%','%BAKERY%','%BAR%',' debit_cr_cd = 'D' THEN trxn_amt WHEN debit_cr_cd = 'C' THEN trxn_amt *(-1) END) as trxn_amt from pcdw.t2_postd_trxn a, pcdw.t2_acct_stat_hist_bc bwhere ike '%michael%kors%') then 'KOR' when ((mrch_nm like any ('%bebe.com%', '%bebe%store%', 'BEBE #270%') and mrch_catg_cd = 5621) or mrch_nm like any %manhattan%bagel%' or (mrch_nm like '%einstein%' and mrch_nm not like '%weinstein%' and mrch_catg_cd in (5812, 5814))) then 'BAG' when ((mrch_nm mrch_catg_cd <> 0) then 'CAB' when (mrch_nm like any ('%tractor%supply%', '%del%s%farm%') and mrch_catg_cd = 5599) then 'TSC' when ((mrch_nm like "%vitamin%shoppe%', "%SUPER SUPPLEMENTS%')) then 'VSI' when (mrch_nm like '%big%5%spo%') then 'BGF' when (mrch_nm like '%STAR%BUCK%') then when (mrch_nm like '%bj%s%restaurant%' and mrch_catg_cd = 5812) then 'BJR' --when (mrch_nm like '%Harris%Teeter%') then 'HTS' when (mrch_nm like mrch_catg_cd in (7922, 7523, 7399, 5999, 5969, 5968, 5967, 5942, 5735, 5411, 5399, 4816)) then 'AMZ' end stk, trxn_dt, trxn_post_dt,SUM(CASE WHEN COH' when (mrch_nm like '%weight%watch%') then 'WTW' when (mrch_nm like '%body%central%' and mrch_catg_cd in (5621,5999,8999)) then 'BOD' %INC%',%FAMILY%',%rio bravo%') then 'BBR' when (mrch_nm like any ('%bww%', '%buffalo wild%wing%') and mrch_catg_cd in (5812, 5814)) then 'BWL' when (mrch_nm like '%office%max%') then 'OMX' when (mrch_nm like '%select%comfort%' and mrch_catg_cd = 5712) then 'SCS' when ((mrch_nm like mrch_nm like any ('%cheesecake%gft%', '%grand%lux%gft%')) then 'CAK' when mrch_catg_cd = 3260 then 'SAV' when (mrch_nm like '%jet%blue%' and 2/8/2014 9:41:57 AM insert into kwo874_svm_agent_infosel case when (mrch_nm like '%CACHE%#%') then 'CAC' when (mrch_nm like '%cabela%' and *ADVANCEAUTO') and mrch_catg_cd = 5533) then '1AA' when ((SUBSTR(mrch_id, 1, 6) IN ('672023','672350') AND mrch_catg_cd IN ('5611','5691')) OR ike any ('cheesecake%', '%grand%lux%', '%cheesecake f%ct%ry%') and mrch_catg_cd = 5812 and mrch_nm not like all ('%bistro%', '%cheesecakes%')) or (trxn_post_dt between date - 3 and date - 1)and stk is not null AND tsys_tcat_class_cd = 'PR' and mrch_cntry_cd like 'US%'and a.acct_id = b.acct_id and mrch_catg_cd not in (0, 8999)) then 'JBL' when mrch_catg_cd in (3066, 3177) then 'LUV' when (mrch_nm like any ("%amazon%', "%kindle%') and mrch_nm LIKE ANY ("%ralph%lauren%', 'PAYPAL *RUGBY', 'RUGBY.COM', 'RUGBY STORE #424', 'RUGBY CAFE LLC')) then 'RL' when (mrch_nm like any 'PAYPAL *BEBE', '%2b%store%')) then 'BEB' when (mrch_nm like any ('%advance%auto%part%', '%advance%auto%#%', '%autopart intl%', 'PAYPAL = 'brio' or (mrch_nm like '%bravo %' and mrch_st_cd <> 'CA' and mrch_catg_cd = 5812)) and mrch_nm not like all ('%BRAVO b.acct_sfx_num = 0 and SVC_OWNR_CD NOT IN ('000086', '000087')group by 1,2,3;

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debit_cr_cd = 'C' THEN trxn_amt *(-1) END) AS last_yr_pur_amt,COUNT(*) AS last_yr_pur_cntFROM pcdw.t2_postd_trxn a, oao009_base_date bWHERE WHEN a.trxn_post_dt = b.last_yr_dtAND tsys_tcat_class_cd = 'PR'AND mrch_nm LIKE ('%cabela%') and mrch_catg_cd in ('5941','5964')AND a.trxn_post_dt UPDATE a FROM oao009_base_date a,(SEL trxn_post_dt,SUM(CASE WHEN debit_cr_cd = 'D' THEN trxn_amt BETWEEN CURRENT_DATE - 374 AND CURRENT_DATE - 364GROUP BY 1) bSET last_yr_pur_amt = b.last_yr_pur_amt, last_yr_pur_cnt = 2/12/2014 11:08:05 AM

accountGroup	symbol	date	quantity	price	
Bonan Huang4ZE89435	CAB 20140222P 70.000	12-Feb-14	400	3.40	\$ (1,360.00)
Bonan Huang4ZE89435	CAB 20140222P 60.000	12-Feb-14	(400)	0.50	\$ 200.00
Bonan Huang4ZE89435	CAB 20140222P 65.000	12-Feb-14	300	1.29	\$ (387.00)
Bonan Huang4ZE89435	CAB 20140222P 60.000	13-Feb-14	300	1.15	\$ (345.00)
Bonan Huang4ZE89435	CAB 20140222P 65.000	13-Feb-14	(300)	2.20	\$ 660.00
Bonan Huang4ZE89435	CAB 20140222P 70.000	13-Feb-14	(200)	5.80	\$ 1,160.00
Bonan Huang5PD69674	CAB 20140222P 70.000	12-Feb-14	300	3.80	\$ (1,140.00)
Bonan Huang5PD69674	CAB 20140222P 60.000	12-Feb-14	(300)	0.55	\$ 165.00
Bonan Huang5PD69674	CAB 20140222P 65.000	12-Feb-14	300	1.45	\$ (435.00)
Bonan Huang5PD69674	CAB 20140222P 60.000	12-Feb-14	(300)	0.40	\$ 120.00
Bonan Huang5PD69674	CAB 20140222P 60.000	13-Feb-14	300	1.00	\$ (300.00)
Bonan Huang5PD69674	CAB 20140222P 65.000	13-Feb-14	(300)	2.20	\$ 660.00
Bonan Huang5PD69674	CAB 20140222P 60.000	13-Feb-14	300	0.15	\$ (45.00)
Bonan Huang5PD69674	CAB 20140222P 70.000	13-Feb-14	(300)	5.60	\$ 1,680.00
Bonan Huang5PD91874	CAB 20140222P 70.000	12-Feb-14	300	3.30	\$ (990.00)
Bonan Huang5PD91874	CAB 20140322P 65.000	12-Feb-14	300	1.85	\$ (555.00)
Bonan Huang5PD91874	CAB 20140222P 60.000	12-Feb-14	(300)	0.35	\$ 105.00
Bonan Huang5PD91874	CAB 20140222P 60.000	13-Feb-14	300	1.10	\$ (330.00)
Bonan Huang5PD91874	CAB 20140222P 70.000	13-Feb-14	(300)	6.40	\$ 1,920.00
Bonan Huang5PD91874	CAB 20140322P 65.000	13-Feb-14	(300)	2.65	\$ 795.00
Nan Huang5PD45586	CAB 20140222P 70.000	12-Feb-14	1,000	3.70	\$ (3,700.00)
Nan Huang5PD45586	CAB 20140222P 65.000	12-Feb-14	1,000	1.60	\$ (1,600.00)
Nan Huang5PD45586	CAB 20140222P 70.000	12-Feb-14	1,000	3.50	\$ (3,500.00)
Nan Huang5PD45586	CAB 20140222P 70.000	12-Feb-14	2,000	3.50	\$ (7,000.00)
Nan Huang5PD45586	CAB 20140222P 70.000	12-Feb-14	1,000	3.40	\$ (3,400.00)
Nan Huang5PD45586	CAB 20140222P 65.000	13-Feb-14	(1,000)	4.40	\$ 4,400.00
Nan Huang5PD45586	CAB 20140222P 70.000	13-Feb-14	(2,000)	10.00	\$ 20,000.00
Nan Huang5PD45586	CAB 20140222P 70.000	14-Feb-14	(3,000)	5.80	\$ 17,400.00
Nan Huang5PD64034	CAB 20140222P 70.000	12-Feb-14	1,000	3.60	\$ (3,600.00)
Nan Huang5PD64034	CAB 20140222P 70.000	12-Feb-14	1,000	3.69	\$ (3,690.00)
Nan Huang5PD64034	CAB 20140222P 70.000	12-Feb-14	2,000	3.60	\$ (7,200.00)
Nan Huang5PD64034	CAB 20140222P 65.000	12-Feb-14	1,000	1.50	\$ (1,500.00)
Nan Huang5PD64034	CAB 20140222P 70.000	12-Feb-14	2,000	3.50	\$ (7,000.00)
Nan Huang5PD64034	CAB 20140222P 65.000	12-Feb-14	2,000	1.45	\$ (2,900.00)
Nan Huang5PD64034	CAB 20140222P 70.000	12-Feb-14	1,000	3.40	\$ (3,400.00)
Nan Huang5PD64034	CAB 20140222P 70.000	12-Feb-14	1,000	3.40	\$ (3,400.00)
Nan Huang5PD64034	CAB 20140222P 65.000	13-Feb-14	(2,000)	5.00	\$ 10,000.00
Nan Huang5PD64034	CAB 20140222P 70.000	13-Feb-14	(2,000)	10.00	\$ 20,000.00
Nan Huang5PD64034	CAB 20140222P 70.000	14-Feb-14	(3,000)	5.70	\$ 17,100.00
Nan Huang5PD64034	CAB 20140222P 70.000	18-Feb-14	(3,000)	6.00	\$ 18,000.00
Nan Huang5PD64034	CAB 20140222P 65.000	19-Feb-14	(1,000)	1.05	\$ 1,050.00

accountGroup	symbol	date	quantity	price	
Bonan Huang4ZE89435	CAB 20140222P 70.000	STATE OF THE PERSON NAMED IN COLUMN	400	3.40	\$ (1,360.00)
Bonan Huang4ZE89435	CAB 20140222P 60.000		(400)	0.50	\$ 200.00
Bonan Huang4ZE89435	CAB 20140222P 65.000		300	1.29	\$ (387.00)
Bonan Huang4ZE89435	CAB 20140222P 60.000		300	1.15	\$ (345.00)
Bonan Huang4ZE89435	CAB 20140222P 65.000		(300)	2.20	\$ 660.00
Bonan Huang4ZE89435	CAB 20140222P 70.000		(200)	5.80	\$ 1,160.00
Bonan Huang5PD69674	CAB 20140222P 70.000		300	3.80	\$ (1,140.00)
Bonan Huang5PD69674	CAB 20140222P 60.000		(300)	0.55	\$ 165.00
Bonan Huang5PD69674	CAB 20140222P 65.000	12-Feb-14	300	1.45	\$ (435.00)
Bonan Huang5PD69674	CAB 20140222P 60.000	12-Feb-14	(300)	0.40	\$ 120.00
Bonan Huang5PD69674	CAB 20140222P 60.000	13-Feb-14	300	1.00	\$ (300.00)
Bonan Huang5PD69674	CAB 20140222P 65.000	13-Feb-14	(300)	2.20	\$ 660.00
Bonan Huang5PD69674	CAB 20140222P 60.000	13-Feb-14	300	0.15	\$ (45.00)
Bonan Huang5PD69674	CAB 20140222P 70.000	13-Feb-14	(300)	5.60	\$ 1,680.00
Bonan Huang5PD91874	CAB 20140222P 70.000	12-Feb-14	300	3.30	\$ (990.00)
Bonan Huang5PD91874	CAB 20140322P 65.000	12-Feb-14	300	1.85	\$ (555.00)
Bonan Huang5PD91874	CAB 20140222P 60.000	12-Feb-14	(300)	0.35	\$ 105.00
Bonan Huang5PD91874	CAB 20140222P 60.000	13-Feb-14	300	1.10	\$ (330.00)
Bonan Huang5PD91874	CAB 20140222P 70.000	13-Feb-14	(300)	6.40	\$ 1,920.00
Bonan Huang5PD91874	CAB 20140322P 65.000	13-Feb-14	(300)	2.65	\$ 795.00
Nan Huang5PD45586	CAB 20140222P 70.000	12-Feb-14	1,000	3.70	\$ (3,700.00)
Nan Huang5PD45586	CAB 20140222P 65.000	12-Feb-14	1,000	1.60	\$ (1,600.00)
Nan Huang5PD45586	CAB 20140222P 70.000	12-Feb-14	1,000	3.50	\$ (3,500.00)
Nan Huang5PD45586	CAB 20140222P 70.000	12-Feb-14	2,000	3.50	\$ (7,000.00)
Nan Huang5PD45586	CAB 20140222P 70.000	12-Feb-14	1,000	3.40	\$ (3,400.00)
Nan Huang5PD45586	CAB 20140222P 65.000	13-Feb-14	(1,000)	4.40	\$ 4,400.00
Nan Huang5PD45586	CAB 20140222P 70.000	13-Feb-14	(2,000)	10.00	\$ 20,000.00
Nan Huang5PD45586	CAB 20140222P 70.000	14-Feb-14	(3,000)	5.80	\$ 17,400.00
Nan Huang5PD64034	CAB 20140222P 70.000	12-Feb-14	1,000	3.60	\$ (3,600.00)
Nan Huang5PD64034	CAB 20140222P 70.000	12-Feb-14	1,000	3.69	\$ (3,690.00)
Nan Huang5PD64034	CAB 20140222P 70.000	12-Feb-14	2,000	3.60	\$ (7,200.00)
Nan Huang5PD64034	CAB 20140222P 65.000	12-Feb-14	1,000	1.50	\$ (1,500.00)
Nan Huang5PD64034	CAB 20140222P 70.000	12-Feb-14	2,000	3.50	\$ (7,000.00)
Nan Huang5PD64034	CAB 20140222P 65.000	12-Feb-14	2,000	1.45	\$ (2,900.00)
Nan Huang5PD64034	CAB 20140222P 70.000	12-Feb-14	1,000	3.40	\$ (3,400.00)
Nan Huang5PD64034	CAB 20140222P 70.000	12-Feb-14	1,000	3.40	\$ (3,400.00)
Nan Huang5PD64034	CAB 20140222P 65.000		(2,000)	5.00	\$ 10,000.00
Nan Huang5PD64034	CAB 20140222P 70.000		(2,000)	10.00	\$ 20,000.00
Nan Huang5PD64034	CAB 20140222P 70.000		(3,000)	5.70	\$ 17,100.00
Nan Huang5PD64034	CAB 20140222P 70.000		(3,000)	6.00	\$ 18,000.00
Nan Huang5PD64034	CAB 20140222P 65.000	19-Feb-14	(1,000)	1.05	\$ 1,050.00

Cabela's Inc. Reports Record Fourth Quarter 2013 Results

Cabela's Inc. Reports Record Fourth Quarter 2013 Results

Published: Feb 13 2014 08:00:01

Cabela's Inc. Reports Record Fourth Quarter 2013 Results

- Total Revenue Increased to \$1.2 Billion, or 4.9%, as Adjusted
- Comparable Store Sales Decreased 10.1%
- Fourth Quarter Diluted EPS Increased 5.6% to \$1.32 vs. \$1.25 a Year Ago, Adjusted for Certain Items
- Merchandise Gross Margin Increased 40 Basis Points to 36.6%
- Next Generation Stores Outperformed Legacy Stores by 50-60% in Sales and Profit per Square Foot
- After-Tax Return on Invested Capital Increased 30 Basis Points to 16.2% for the Full Year

Business Wire

SIDNEY, Neb. -- February 13, 2014

Cabela's Incorporated (NYSE:CAB) today reported strong financial results for fourth quarter fiscal 2013.

For the quarter, adjusted for the Visa antitrust settlement, total revenue increased 4.9% to \$1.2 billion; Retail store revenue increased 7.3% to \$711.8 million; Direct revenue decreased 4.1% to \$369.7 million; and Financial Services revenue increased 23.4% to \$102.7 million. For the quarter, comparable store sales decreased 10.1%. On a GAAP reported basis, total revenue increased 6.1% and Financial Services revenue increased 45.7%. See the supporting schedule to this earnings release labeled "Reconciliation of GAAP Reported to Non-GAAP Adjusted Revenue of Financial Services Segment and Total Revenue" for a reconciliation of the GAAP to non-GAAP revenue amounts.

For the quarter, net income increased 5.5% to \$94.7 million compared to \$89.8 million in the year ago quarter, and earnings per diluted share were \$1.32 compared to \$1.25 in the year ago quarter, each adjusted for certain items. The Company reported GAAP net income of \$80.1 million and earnings per diluted share of \$1.12 as compared to GAAP net income of \$68.0 million and earnings per diluted share of \$0.95 in the year ago quarter. Fourth quarter 2013 GAAP results included provisions for interest and taxes related to an increase in tax reserves of \$0.16 per diluted share and an impairment loss of \$0.04 per diluted share related to a retail store site. Fourth quarter 2012 GAAP results included impairment losses of \$0.19 per diluted share primarily related to land held for sale and an \$0.11 per diluted share reduction related to the Visa antitrust settlement. See the supporting schedules to this earnings release labeled "Reconciliation of GAAP Reported to Non-GAAP Adjusted Financial Measures" for a reconciliation of the GAAP to non-GAAP financial measures.

For fiscal 2013, net income increased 22.0% to \$238.3 million compared to \$195.3 million last year, and earnings per diluted share were \$3.32 compared to \$2.72 a year ago, each adjusted for certain items. The Company reported GAAP net income of \$224.4 million and earnings per diluted share of \$3.13 as compared to GAAP net income of \$173.5 million and earnings per diluted share of \$2.42 a year ago. Fiscal 2013 GAAP results included adjustments to the Visa antitrust settlement liability resulting in a \$0.03 per diluted share

Bloomberg Law*

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Cabela's Inc. Reports Record Fourth Quarter 2013 Results

benefit, impairment and expense adjustments primarily related to two retail locations of \$0.06 per diluted share, and provisions for interest and taxes related to an increase in tax reserves of \$0.16 per diluted share. Fiscal 2012 GAAP results included impairment losses of \$0.19 per diluted share primarily related to land held for sale and an \$0.11 per diluted share reduction related to the Visa antitrust settlement. See the supporting schedules to this earnings release labeled "Reconciliation of GAAP Reported to Non-GAAP Adjusted Financial Measures" for a reconciliation of the GAAP to non-GAAP financial measures.

"Cabela's revenue and earnings per share for the full year grew at a double-digit rate for the fifth consecutive year," said Tommy Millner, Cabela's Chief Executive Officer. "However, results for the fourth quarter did not meet our expectations, which were set earlier under more robust conditions. Specifically, the two biggest short-term factors affecting results in the quarter were a much sharper than expected decline in ammunition sales as compared to last year's surge and a softer than expected holiday season as evidenced elsewhere. On the other hand, comparable store sales excluding firearms and ammunition were down 3.5% with positive comparable store sales in hunting apparel, men's casual apparel, footwear and non-shooting related hunting equipment in the quarter."

"At the same time, we are delighted with the growing success of our longer-term initiatives, which will lead to ongoing profitable growth for Cabela's," Millner said. "These include the results of our new stores, which performed at least 50% better than our older stores on a sales and profit per square foot basis and generated comparable store sales 200 basis points better than our older stores. For the full year, we operated 11 of our new format stores that averaged sales per square foot of over \$500. We currently plan to open 14 new stores in 2014."

"We also are pleased that merchandise margins increased 40 basis points in the quarter to 36.6%. This is a result of the sales shift from firearms and ammunition to soft goods and also, importantly, the margin improvement in our soft goods category," Millner said. "Customer response to higher margin Cabela's branded products such as ZONZ™ camo, ColorPhase™ technology, the Regulator and Instigator bows and OutfitHER® clothing has been extremely encouraging. During the quarter, the penetration of Cabela's branded products across our entire assortment improved from 27.6% to 32.5% as compared to the same quarter a year ago. With our strong focus on product innovation, we expect future increases in Cabela's brand penetration throughout our entire product assortment. These factors taken together should generate merchandise margin improvement in 2014 and 2015."

"Our Direct business performed much like retail in that customers shifted away from ammunition more sharply than we expected," Millner said. "On the other hand, fishing, camping and most soft goods categories experienced sales growth in the quarter. Additionally, improvements in our mobile platform contributed to a meaningful lift in both traffic and conversion. Lastly, we also benefited from our implementation of omnichannel fulfillment from our retail locations."

The Cabela's CLUB Visa program had another solid quarter. During the quarter, growth in average active credit card accounts was 8.6% due to new customer acquisitions in our Retail and Internet channels. For the quarter, net charge-offs remained at historically low levels of 1.76% compared to 1.91% in the prior year quarter. Increased Financial Services revenue was driven by increases in interest and fee income as well as interchange income. Growth in average balance per active credit card account was 4.1%, and growth in average credit card loans was 13.1%.

"We are very pleased to see continued improvement in one of our most important metrics, return on invested capital," Millner said. "Return on invested capital for 2013 improved 30 basis points over last year to 16.2%. With our strong operational improvements, we are confident in our ability to generate even further

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improvements in return on invested capital for years to come."

During the fourth quarter, the Company reserved \$9.3 million for potential adjustments to the provision for income taxes that may result from audits in progress and \$3.6 million of interest related to these matters. For 2014, the tax rate is expected to be between 33.0% and 34.0%.

As previously announced, the Company's Board of Directors approved a share repurchase program designed primarily to offset shareholder dilution resulting from the granting of equity-based compensation awards. As a result, the Company intends to repurchase up to 650,000 shares of its common stock in open market transactions through February 2015.

"Despite the slower finish, 2013 represents a year of record breaking performance and significant accomplishment within our business," Millner said. "Fiscal year 2013 was our fifth consecutive year of double-digit earnings per share growth to a new record of \$3.32. Comparable store sales increased by 3.9% which represented the fifth consecutive year of growth, and Direct revenue increased for the first time in six years growing 4.6%. Consolidated operating margin improved for the fifth consecutive year to 10.0%, and merchandise margins were 36.8%, representing the fourth consecutive year of improvement."

"We believe that our operational improvements combined with new store performance will continue to deliver outstanding returns to shareholders," Millner said. "At the same time, in the next two quarters, we expect moderation in both comparable store sales and in the Direct business due to the stronger than expected fall-off from last year's firearms and ammunition surge. We expect first quarter 2014 earnings per diluted share to be between \$0.32 and \$0.42 and full year 2014 earnings per diluted share to increase at a high single-digit or low double-digit rate versus 2013 adjusted earnings per diluted share of \$3.32."

Conference Call Information

A conference call to discuss fourth quarter fiscal 2013 operating results is scheduled for today (Thursday, February 13, 2014) at 11:00 a.m. Eastern Time. A webcast of the call will take place simultaneously and can be accessed by visiting the Investor Relations section of Cabela's website at www.cabelas.com. A replay of the call will be archived on www.cabelas.com.

About Cabela's Incorporated

Cabela's Incorporated, headquartered in Sidney, Nebraska, is a leading specialty retailer, and the world's largest direct marketer, of hunting, fishing, camping and related outdoor merchandise. Since the Company's founding in 1961, Cabela's® has grown to become one of the most well-known outdoor recreation brands in the world, and has long been recognized as the World's Foremost Outfitter®. Through Cabela's growing number of retail stores and its well-established direct business, it offers a wide and distinctive selection of high-quality outdoor products at competitive prices while providing superior customer service. Cabela's also issues the Cabela's CLUB® Visa credit card, which serves as its primary customer loyalty rewards program. Cabela's stock is traded on the New York Stock Exchange under the symbol "CAB".

Caution Concerning Forward-Looking Statements

Statements in this press release that are not historical or current fact are "forward-looking statements" that are based on the Company's beliefs, assumptions, and expectations of future events, taking into account the information currently available to the Company. Such forward-looking statements include, but are not limited to, the Company's statements regarding opening 14 new stores in 2014, future increases in Cabela's brand

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